



Disclaimer: unless otherwise agreed by the Council of UPOV, only documents that have been adopted by the Council of UPOV and that have not been superseded can represent UPOV policies or guidance.

This document has been scanned from a paper copy and may have some discrepancies from the original document.

Avertissement: sauf si le Conseil de l'UPOV en décide autrement, seuls les documents adoptés par le Conseil de l'UPOV n'ayant pas été remplacés peuvent représenter les principes ou les orientations de l'UPOV.

Ce document a été numérisé à partir d'une copie papier et peut contenir des différences avec le document original.

Allgemeiner Haftungsausschluß: Sofern nicht anders vom Rat der UPOV vereinbart, geben nur Dokumente, die vom Rat der UPOV angenommen und nicht ersetzt wurden, Grundsätze oder eine Anleitung der UPOV wieder.

Dieses Dokument wurde von einer Papierkopie gescannt und könnte Abweichungen vom Originaldokument aufweisen.

Descargo de responsabilidad: salvo que el Consejo de la UPOV decida de otro modo, solo se considerarán documentos de políticas u orientaciones de la UPOV los que hayan sido aprobados por el Consejo de la UPOV y no hayan sido reemplazados.

Este documento ha sido escaneado a partir de una copia en papel y puede que existan divergencias en relación con el documento original.

UPOV

IOM/I/12

ORIGINAL: English/French
German

DATE: May 4, 1984

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

MEETING
WITH INTERNATIONAL ORGANIZATIONS

Geneva, November 9 and 10, 1983

RECORD OF THE MEETING

compiled by the Office of the Union

1. Mr. Rigot, President of the Council, opened the meeting and welcomed the participants with the following words:

"It is a pleasure for me, on behalf of UPOV, to welcome you to this concerted meeting between international non-governmental organizations of breeders and our Union.

I bid you welcome to this House. May you feel at least a little at home here during the time our debates will last.

Through yourselves, it is with the whole of the profession that you represent that we will be reflecting on our problems for the next two days.

I will therefore express the hope that our dialogue may be realistic, effective and dynamic.

To support the creative genius of those who produce better varieties, more resistant to disease and to the uncertainties of the weather, to endeavor to reward the efforts and investments made by the breeders and to prevent them being deprived of the fruit of their work, such is indeed the task that UPOV carries out within the limits of the Paris Convention, through the good offices of the authorities of those seventeen States that have so far subscribed to this charter for progress and solidarity.

To devise means of increasing yield is indeed to augment the production of agriculture and of food, to promote productivity and, above all, to push back the frontiers of hunger and malnutrition in our unbalanced world.

Seventeen nations across five continents therefore subscribe today to this ideal, constituting, I would hope, but the vanguard of a movement that is destined to attract many other countries sharing by the same practical, human and scientific preoccupations and concerns.

If we make an exception of those few States that are indeed able to protect all genera and species, some 900 taxa, among food, ornamental and forestry plants alike, are in fact protected and close on 10,000 varieties throughout the world have been given a title of protection.

Such is the present record of a Union that is to celebrate in three years' time the twenty-fifth anniversary of its basic charter, the 1961 Paris Convention. There exists a marked interest in our activities and their repercussions in a great number of countries! There exist a few fierce enemies of protection in general and of UPOV in particular! Need I say more to demonstrate the strong impact of our Union throughout the world?

However, as the Union grows, develops and extends, new problems arise, others are amplified, and at the same time the search for solutions becomes more complex. Associations are indeed like men; the more their knowledge is extended and improved, the more the immensity of their ignorance can be measured.

The more varieties there are, the more chances there will be, in principle, to go forward and to satisfy genuine needs, both of the creators and of the users, the more there will be chances to meet the objectives that have been laid down in advance. But also, the more these varieties come closer to each other, resemble each other, the more they are likely to be confused, if not by the creators, then by the users at least. Do these differences, these distances that are shrinking, therefore not constitute a danger? Let us reflect on this and avoid compromising the future.

Biotechnology and genetic manipulations open up, it would seem, bright prospects! Many believe so! What if they are not altogether right? By keeping an adequate margin of flexibility, we would have more likelihood of maintaining our control over events. To be capable of limiting one's ambition is a form of wisdom! Or perhaps it is simply realistic thinking.

The more protected varieties there are, the more there will be denominations to be registered, and therefore possible similarity and probable confusion. Another problem here! I am aware that everyone has his own point of view and perhaps even his own solution that is perfectly applicable to his sector of activity. However, should we see the problem as a whole or should we study it sector by sector? Here again, imagination, common sense and a concern for the general interest should be present in our debates.

True international cooperation in the examination of varieties is an achievement that everyone ardently hopes for. It can indeed permit time, money, effort and both material and intellectual investment to be saved. Both breeders and users will find a profit. It is therefore in everybody's interests.

Such cooperation can assist the least favored in obtaining the advantages of protection and allow them to enjoy its beneficial effects. To cooperate is to carry out a work of solidarity, solidarity that should above all reach the least favored. However, cooperation cannot be achieved unless rules are laid down, rules that will possibly require sacrifices of some of us. This is the price to be paid for a compromise based on general consensus.

The members of UPOV have their own ideas on all these problems and some of them have solutions. However, our Union hopes to arrive at conclusions that can be accepted by all or at least by the majority. In the last count, it is indeed the breeders who are the most directly affected by UPOV's activities and decisions.

To dialogue means primarily to guarantee reciprocal, mutual information, to identify the approaches to be adopted, to arrive at a convergence that will enable UPOV to draw up, within the limits of the Convention, solutions meeting with the approval of the majority of breeders whilst also complying with the general interest. We therefore await your arguments, your proposals and your technical reasons, since it is basically of technology that we will speak to you.

Thus I have, I believe, explained and identified the content, the means, the purposes and the objectives of this concerted meeting.

I have already referred to the future and to the necessary dynamism of UPOV. The future is of concern to us for more than one reason. UPOV's mission is not only to administer the present but also to look forward. The 1982 Symposium devoted to genetic manipulations, amongst other things was one proof of that, and the forthcoming Symposium, in 1984, will provide yet another token of this concern.

Biotechnology, an extraordinary science still in its experimental stage, nevertheless constitutes an important stake in science and economy. It is a whole set of techniques utilizing microorganisms and other biological agents to program cells for a given production or to modify the genetic heritage, with all the implications one may imagine in respect of varieties. The breeder's work has always, at least until now, merged with the outcome of his work, that is to say a new variety. There is now a risk, however, of this new science causing a clear distinction to be made between a technique that is employed, as yet to be developed perhaps, for which there may be many uses, on the one hand, and the results of the work, a new plant, on the other. This now brings us back to breeder's rights, patents and the distinctness of varieties. To be sure, the world is changing! Naturally, we should not allow these prospects to become a complex or an obsession. We should quite simply be aware and look forward, we should not imprison ourselves within restrictive solutions but, on the contrary, we should leave wide open a window looking out towards the future.

Nothing is indeed definitive or unchangeable in biology; progress, developments arrive to change the course of things and to lay down new laws.

This is why UPOV wishes to cooperate, to collaborate with the organizations you represent and which should be called upon to make proposals.

Indeed, our long-term aim remains, of course, the full harmonization of laws, systems and protection authorities in all the States so that one day a procedure can be achieved under which there will be a single application, a single examination and a single title of protection for a number of States.

We still have a long way to go. It will not seem as long if we have your company!

As you will have seen in document IOM/I/2, which I believe you have, the debates will be presided over by the two Chairmen of the UPOV Committees, firstly by Mr. Elena, Chairman of the Technical Committee, as regards Item 2 "Minimum Distances Between Varieties," and by Mr. Heuver, Chairman of the Administrative and Legal Committee, for Items 3 and 4 "International Cooperation" and "Variety Denominations."

Mr. Rigot asked Mr. Elena to take the Chair for the debates.

MINIMUM DISTANCES BETWEEN VARIETIES

2. Mr. Elena (Chairman of the Technical Committee) said that it was a pleasure for him to act as Chairman for item 2 of the agenda, which concerned the subject of minimum distances between varieties, one of the most important questions facing the plant variety protection offices of the UPOV member States and a matter of great importance to breeders.

He drew the attention of the meeting to document IOM/I/3, prepared by the UPOV secretariat, which contained a restatement of technical rules adopted in UPOV that were of importance when minimum distances between varieties were determined. Comments had been received from five international organizations. Those comments had been reproduced in documents IOM/I/6 to 10. Mr. Elena invited Dr. Mast, Vice Secretary-General, to introduce document IOM/I/3.

3. Dr. Mast commented on document IOM/I/3, concerning "minimum distances between varieties," sent on May 4. He explained that the term "minimum distances between varieties" had been coined in respect of the difference that a variety must demonstrate in respect of any other generally known variety in order for that new variety to qualify for the granting of plant breeders' rights. The matter was in no way new since it had played an important part from the very beginning of the preparatory work on the UPOV Convention and indeed the term itself was also not new. A whole series of circumstances had meant that the matter of minimum distances between varieties had nevertheless become one of greater current interest over the last few years. Dr. Mast listed those circumstances that had led to this renewal of interest. He referred firstly to the well-known difficulties that had arisen in respect of

those varieties where frequent mutations occurred or where mutations could be induced without great difficulty. He subsequently referred to the frequently discussed question of whether characteristics obtained by the use of electrophoresis or other sophisticated means should be made use of in testing for distinctness, homogeneity and stability. Thirdly, he pointed out that UPOV was continuously working on the revision of Test Guidelines and that, in that context, the question unavoidably arose whether further characteristics should be included to broaden the scope of the Test Guidelines. The question immediately arose of the status of minimum distances. Dr. Mast further explained that breeders frequently used the same or similar initial material and therefore varieties, particularly those that were successful on the market, came very close to each other and it was consequently difficult on occasion to distinguish between them. Finally, Dr. Mast mentioned the fear that new technical processes could make it too easy to breed into a successful variety new characteristics of little economic or cultivation significance so that the outcome of the breeding process would be a new variety that was sufficiently distinct from the successful variety and did not therefore come within the scope of protection of that variety. In such way, the protection granted to the successful variety, it was feared, could be undermined to the detriment of the breeder without any genuine contribution having been made for the general interest on the other hand. These questions had finally led to the suggestion from among the professional organizations that the question of minimum distances should be the subject of discussions with them.

The Office of the Union had therefore initially made reference in document IOM/I/3 to the basic provisions of the Convention that dealt with the matter in great detail. Article 6(1)(a) of the Convention contained a basic rule that in order to qualify for protection a variety had to be distinguishable by one or more important characteristics from any other variety whose existence was a matter of common knowledge at the time protection was applied for. Document IOM/I/3 described in detail how the terms "important characteristic" and "clearly" had been interpreted. He did not wish to repeat those explanations in every case but felt that a reference to the interpretation of the term "important" was called for. When drafting the Convention and shortly after its entry into force, the term "important" had been understood in a functional sense. However, UPOV had subsequently come to the conclusion that "important" was to be interpreted as "important for distinctness." It was probably also worth mentioning that UPOV had adopted a series of guidelines and principles in the past years in which various principles of interpretation had been laid down. Dr. Mast referred in that case to the UPOV Test Guidelines with their tables of characteristics, in which, however, the characteristics of significance for testing were not exhaustively listed and each State had the possibility of further supplementing the tables. Certain of those Test Guidelines also contained recommendations on various questions of interpretation as for instance the Test Guidelines for maize referred to in document IOM/I/3. A particularly important document for obtaining clarification as to what could be deemed a minimum distance between two varieties was constituted by the General Introduction to the UPOV Test Guidelines. That contained a number of references for the interpretation of the term "distinctness." Document IOM/I/3, finally, also referred to a number of recent decisions by the Technical Committee. That Committee had said, for instance, that a distinction had to be made between characteristics that could be used for identifying a variety and such characteristics as were important for the distinguishing of a variety.

4. Mr. Elena, in thanking Dr. Mast for his introduction, congratulated the secretariat on the drafting of document IOM/I/3 and said that it could serve as a valuable basis for the discussion.

He then invited the representatives of the organizations to speak to their comments on the subject of minimum distances between varieties. Noting that he proposed to follow the numerical sequence of the documents, Mr. Elena asked the representative of the International Community of Breeders of Asexually Reproduced Fruit Tree and Ornamental Varieties (CIOPORA) to introduce the relevant part of document IOM/I/6.

5. Mr. Royon (CIOPORA) noted that a fairly recent letter from his Association, dealing solely with the problems of minimum distances, had not yet reached the UPOV Secretariat. It in fact concerned the conclusions at which the select committee set up by his Association had arrived. Mr. Royon read out the letter:

"(a) It is necessary to increase the "minimum distances" beyond which a variety may be recognized as new in relation to varieties that are a matter of "common knowledge" and therefore as protectable.

"(b) The minimum level of differentiation between the varieties, however, should be laid down species by species, taking into account the special features of each. It would be eminently desirable that when establishing these varying levels of differentiation, the government experts should consult the professional experts in order to take account of their practical experience.

"(c) Differentiation between varieties should, in most cases, be possible "visually" without the need to use sophisticated techniques whose use should be restricted to identifying varieties.

"However, to allow for the development of techniques and of science, CIOPORA feels that the criterion of "visual" determination of minimum distances could prove inadequate, particularly in the case of differences that concern solely physiological characteristics.

"On the other hand, in the case of varieties that are morphologically identical or very close, but physiologically distinct, measures should be provided to determine any possible abuse of rights.

"CIOPORA considers that the difficulties raised by this problem constitute a further argument to support its view that breeder's rights need to be extended to the finished product on the market.

"(d) As regards mutations, CIOPORA considers that the requirement in examination of greater minimum distances between varieties should make it possible to eliminate the parasitic competition of "mini-variations" for which at the present time (particularly for certain species such as begonia, African violet, kalanchoë, pelargonium, etc.) abusive applications for protection are made to the detriment of varieties from which they have been derived.

"Moreover, by giving greater value to a title of protection, such a measure would also comfort, if not satisfy entirely, those of the breeders who would also wish to obtain a droit de suite in all mutations of their varieties, even where such mutations are sufficiently distinct to be protectable."

Mr. Royon said that he was willing to explain each of those points during the debates.

6. Mr. Elena invited the representative of the Association of Plant Breeders of the European Economic Community (COMASSO) to introduce the relevant part of document IOM/I/7.

7. Mr. Winter (COMASSO) noted that the position of COMASSO did not differ essentially from that of ASSINSEL, the worldwide organization of plant breeders. However, COMASSO did wish that a number of specifically European aspects be included in the discussion. Mr. Winter referred in that context to the following items. It had to be realized that breeders' rights did not constitute simply an abstract structure but that they had an economic background. A plant breeder used his rights as an aid in achieving compensation for his creative activities and in order, in that way, to put new varieties on the market and also to have the necessary funds for further breeding activities. Document IOM/I/3 constituted a very good presentation of overall developments since the coming into being of UPOV. He wished in that connection to point out that the breeder's obligation to work continuously towards innovation and to promote development led to an area of tension as shown by the document. That was quite normal. He wished to utter a warning in that respect against an attempt to resolve this area of tension through recommendations or guideline measures of a comprehensive nature which would not leave room for considerations amounting to the fact that different reflections could indeed be devoted to different species. Within COMASSO it was to be noted that it had not been possible to achieve a unified position among the representatives of the various species on the question of closer minimum distances. In the cereals and fodder area, the breeders were very satisfied at the prospect of the possibility of having yet closer distances between individual varieties to take account of innovative endeavors. As far as vegetable breeders were concerned, exactly the opposite was the case. As had already been mentioned, CIOPORA had had the same thoughts. It was therefore not possible for the problems to be resolved in a general way.

A quite specific aspect resulted from the fact that within the European legal territory the exercise of breeders' rights was subject to rules of public law. Rights were equally conditional on the application of public law provisions. The European Communities had issued directives on trade in seed. In the case of species of agricultural plants, for example, the requirement of value for cultivation and use had been introduced as a prerequisite for approval for trade in seed within the EEC. It was often very difficult to step over this threshold. It also meant, however, that the danger of having too many varieties due to the distances between varieties being too small was to some extent regulated by the requirements of value for cultivation and use.

He wished to make a number of brief comments on the various items. COMASSO was of the opinion that the current interpretation of the term "important characteristic" should be maintained; it should not be understood functionally, but should mean "important for distinctness." It was of the utmost importance to be able to use additional characteristics to determine distinctness without the interference or obstruction of cumbersome administration. It was to be noted that document IOM/I/3 also made a clear distinction between testing methods and identification methods. A method that could be used to identify a variety and that had already reached a certain degree of maturity in that connection could not be directly adopted for assessing distinctness; he wished to mention the example of electrophoresis.

Finally, he wished to repeat the appeal he had made at the beginning of his remarks. In any event, the relation of the question to the specific species should be placed in the forefront of discussions and an effort should be made to avoid a perfectionistic solution that covered all eventualities but did not take account of the particularities of the individual points.

8. Mr. Elena invited the representative of the International Federation of the Seed Trade (FIS) to introduce the relevant part of document IOM/I/8.

9. Dr. Loden (FIS) said that the position of FIS was that no change was wanted in the interpretation of the word "important" agreed upon at the 1978 Diplomatic Conference. The decision then had been that the word "important" meant "important for distinguishing one variety from another." FIS had noticed from document IOM/I/3 that the Technical Committee had supplemented that definition. FIS wished to raise two questions in that regard. First, it wished to question how a Technical Committee could take decisions that would in effect change the interpretation agreed upon at the Diplomatic Conference, or even how any organ of UPOV could take such a decision. It appeared to FIS that the supplementation of the definition of "important" by the Technical Committee was a means of trying to quantify the word "important". Those of the participants who had been involved in the discussions for years preceding 1978, on that occasion, and since, knew that it had been agreed that it was impossible to quantify the word "important". Secondly, FIS wished to question how, in the light of the 1978 decision, certain characters could be used for identification and yet not to establish distinctness.

10. Mr. Elena invited the representative of the International Association of Plant Breeders for the Protection of Plant Varieties (ASSINSEL) to introduce the relevant part of document IOM/I/9.

11. Dr. Mastenbroek (ASSINSEL) said that it was apparent to everyone present that the matter under discussion was a very difficult one. That was demonstrated by the time and energy devoted to it within UPOV and within ASSINSEL. The fact that breeders within ASSINSEL were not of a common opinion was not a matter for secrecy. It was not surprising, in his view, given that ASSINSEL'S membership included breeders of potatoes, cereals, maize, grasses, and vegetables, breeders working with vegetatively propagated, self-pollinated and cross-pollinated crops. ASSINSEL was of the opinion that it was virtually impossible to devise a general rule for all crops, varying in their nature of propagation as they were. Therefore, the position of ASSINSEL was that the problem should be tackled species by species.

Dr. Mastenbroek noted that some members were satisfied with the present situation, while others were prepared to accept smaller distances between varieties. All were convinced that for several species (e.g. grasses, flax, onions, but not potatoes) there was an urgent need for new characteristics by which to distinguish varieties. ASSINSEL would appreciate new characteristics rather than smaller distances between existing characteristics. It therefore requested the competent authorities to make funds and people available to maximize the search for new distinguishing characters.

12. Mr. Elena invited the representative of the International Association of Horticultural Producers (AIPH) to introduce the relevant part of document IOM/I/10.

13. Mr. Slocock (AIPH) said that he wished to refer delegates to the second page of document IOM/I/10 and to identify some more or less simple points made there. He had been encouraged by the fact that other speakers, perhaps not all, had agreed with AIPH's requirement for larger minimum distances rather than smaller ones. AIPH felt that it was important for the currency and the authority of plant breeders' rights that new varieties could be readily seen to be new. It would not encourage--and perhaps in that respect it would not agree with the last speaker--searching for new characteristics by which to identify new varieties. New varieties in the view of AIPH should be clearly new varieties. It was therefore important that the authorities responsible for granting breeders' rights should always be the determining authority for deciding whether a new variety was sufficiently distinguishable. In that respect AIPH regretted the change made to the Convention in 1978 when the words "morphological characteristics" and "physiological characteristics" were removed. Everyone was well aware of the more sophisticated techniques that were available--and of the fact that still more would become available--to distinguish new varieties, but morphology was an old and respected science and AIPH considered it important, certainly in the field of ornamental plants, that morphology as well as physiology be respected. Finally, AIPH wished to make a point about the status of mutants. Mutants were an increasing source of new varieties, but the obvious fact that mutants tended to occur in varieties and species that were lacking in homogeneity and stability should not be forgotten. AIPH thought that it was important, in view of the practical implications, that stability be made a prerequisite of the granting of plant breeders' rights. Mr. Slocock concluded by noting that AIPH had made a specific reference to the problem that could arise if new varieties were insufficiently stable, in particular in relation to Article 10 of the Convention.

14. Mr. Elena invited representatives of the other organizations present to make a general statement on minimum distances if they so wished.

15. Dr. von Pechmann (International Association for the Protection of Industrial Property (AIPPI)) began by making a few comments on the structure and activities of the organization he was representing. He then remarked that in connection with the matter in hand he had noted from preparatory document IOM/I/3 that the meeting was not to discuss legal matters. His view was, however, that it would be unavoidable to take into account the legal implications of the minimum distances between varieties which were to be discussed. Plant breeders' rights constituted industrial property rights. They were comparable to patent rights. They gave an exclusive right. Just as in the case of patents, the legal philosophy behind them was based on the conception of a reward, on the one hand, and an incentive, on the other, that was provided by such protection.

One of the most important differences between patent protection and variety protection was indeed that there existed no dependency. Consequently, the Office granting variety protection could also exert influence on the extent of protection, which was not the case in the award of patent rights, since in all countries throughout the world the matter of the extent of protection of a patent was clarified by the courts in infringement proceedings. In the case of variety protection, the grant of protection for a new variety restricted the scope of protection for the parent plant or the original plant since the award of rights indeed excluded dependency. Consequently, the AIPPI was of the opinion that one could not avoid the question of what was truly to constitute an important characteristic when applied to protection under those rights.

ASSINSEL had again clearly stated in its comments that at the time the Union was established and the Convention was drawn up, the term "important characteristic" had been understood as a characteristic that had to be of importance for the type of use for which the variety was commercially marketed. That meant, therefore, that account had to be taken of the fact that the term "important characteristic" could not be seen unorganically in the context of protection, but had to be brought into relation with the effects deployed by variety protection, that is to say interpreted as meaning "a characteristic important for the economic value of the variety." He believed that the problems that had arisen could perhaps be solved more satisfactorily in that way.

16. Mr. Elena invited the Vice Secretary-General to comment on Dr. von Pechmann's reference to the legal aspects of the question of minimum distances between varieties.

17. Dr. Mast admitted that, indeed, it had been said in the invitation to the meeting and in the preparatory documents that only technical aspects were to be discussed and not legal questions. It had been UPOV's intention to keep the number of matters to be discussed within tight limits. This did not, however, exclude touching upon legal aspects of the various items for discussion where these were closely linked to the technical aspects of the same question.

Dr. von Pechmann had referred to a very important legal aspect of the question, namely the link between minimum distances between varieties and the scope of protection. The preparatory documents had dealt primarily with assessment of the minimum distances between varieties as part of the process for granting breeders' rights. The question was how big the distance between two varieties had to be to enable protection to be granted to the second variety. Dr. von Pechmann had quite rightly observed that the determination of minimum distances between varieties for this purpose had direct effects on the scope of protection of the first variety, namely the question of how far the protection afforded to the first variety extended. It must indeed be realized that under plant breeders' rights the scope of protection of one variety reached its limit at that point where protection could be granted for a second variety. This was a consequence of the basic rule in the UPOV Convention, which departed from patent law, according to which anyone may use a variety, including a protected variety, to develop a further variety free of cost and that the material of this further variety could also be freely marketed on a commercial basis. As soon as anyone has further developed a protected variety into a new variety which may be distinguished from the first mentioned variety, he could obtain protection for the new variety and could freely market the material of the new variety. At the point where the new variety "began," protection for the first variety had therefore logically to end.

18. Dr. Troost (AIPH) said that he did not wish to add to the statement already made by the Vice-Chairman of AIPH's Committee for the Protection of Plant Breeders' Rights, Mr. Sloccock, but, having listened to the words of Dr. von Pechmann, he would like to introduce what might be a clearly distinguishable standpoint. In the patent field, an owner of a new patent that was based on the use of part of an older patent (a dependent patent) had to pay some tribute to the owner of the former patent. In the plant breeders' rights field, if it were decided that minimum distances could be smaller, then it might also be necessary to introduce the idea of dependent breeders' rights.

19. Mr. Elena said that, before opening the general discussion, he would like to express the hope that the organizations would make the fullest use of the opportunity to make their views known. The meeting was, of course, in the nature of a hearing and it might not be possible for representatives of member States to answer or react immediately. However, he wished to assure the organizations that their views would be given full consideration by the experts in the various committees of UPOV.

Mr. Elena believed that it was clear from the papers submitted and from the statements made that the question of minimum distances gave rise to differing reactions according to the species involved. He suggested that it would help the discussion of such a complex question if some broad groupings of species could be defined. There were many ways in which that could be done. He would suggest that the best way for the current purpose would be to divide the species into two main groups; first, the vegetatively propagated species, and secondly, the sexually reproduced species. The second group could be subdivided into self-fertilized and cross-fertilized species.

20. Mr. Royon said that he would like, before a detailed discussion began, to strongly second Dr. von Pechmann's remark that it was difficult and nearly impossible to separate the technical aspects of the subject from its legal aspects.

Mr. Royon went on to say that he would like to try to explain why legal aspects were pervading the whole matter. CIOPORA believed that the preliminary examination of a new variety was very closely related to the scope of the breeder's right and to the eventual possibility for the breeder to fight for

his rights in infringement proceedings. If the minimum distances were made larger, then it would be easier for the breeder to have a court decide that, for example, a grower marketing a variety that was too close to his variety was infringing his rights. The problem was whether infringement should be considered as the production and marketing of the protected variety or whether infringement was also producing and marketing a variety that was too close to the protected variety. For CIOFORA, it was the second solution that should prevail. The Colloquium organized by CIOFORA in 1982 on the subject of "Preliminary Examination and Infringement" had already provided an opportunity to show how closely related the two notions could be. As in the fields of patent and trademark infringement, the notion of infringement of plant breeders' rights should be decided and assessed according to the resemblance between two varieties rather than according to the sometimes very minute differences that might exist between them. In the opinion of CIOFORA, that concept might solve, or at least partly resolve, the difficulties being met by some breeders as a result of mutations or the so-called "mini-variations" between varieties.

21. Dr. Leenders (ASSINSEL) said that he wished to refer to Mr. Elena's proposal to group the species in a certain way for the purposes of the general discussion. Dr. Leenders said that he had noted that colleagues from the ornamental sector would favor somewhat larger distances. Mr. Slocock, for instance, had said that it should be possible to see the difference between two varieties and that it should not be necessary to use sophisticated methods to establish that difference. Dr. Leenders remarked that he had much understanding for that point of view. In the ornamental sector it was what one saw that was important; to distinguish between two otherwise identical varieties by electrophoresis would not seem to him to be very useful or productive. In the agricultural and horticultural (vegetable) sectors, the situation was different. The wish to use small differences existed there because the main factor, which was yield, was not a characteristic that could be used to distinguish between varieties. Dr. Leenders believed, therefore, that it would help the discussion more if the distinction between the ornamental sector and the other sectors were recognized.

22. Mr. Elena, remarking that ornamental plants constituted one of the main groups in the vegetatively propagated species, suggested that it might help to clarify matters if an expert from the Office of one of the UPOV member States could present some concrete cases.

23. Mrs. Löscher (Federal Republic of Germany) said that she was happy to take the opportunity to describe in what way and according to which methods ornamental plants were examined. She showed a number of slides and commented on them in each case.

24. Mr. Elena thanked Mrs. Löscher for her colorful explanations regarding characteristics, distances and mutations.

25. Dr. Böringer (Federal Republic of Germany) observed that the slides shown by Mrs. Löscher had indeed made it clear to everyone that, at least for ornamental plants, the question whether a characteristic was to be laid down as important for distinctness only or for economic value only could not be answered that simply. The characteristics laid down in the UPOV Test Guidelines were frequently just as important for the distinctness as for the market value of the variety. If one made the experiment of looking at the young growth of a variety firstly from some distance and then again from close range, the impressions gained were different, and they would be from the point of view of the grower as from that of the variety examiner. Secondly, he felt that one of the observations made by Mrs. Löscher was very important, that was to say that characteristics that were not as yet contained in the examination guidelines could be made use of where that proved necessary. In view of the increasingly economic aspects in breeding, characteristics could be laid down as important where they were significant for the growing qualities of the variety. Mrs. Löscher had demonstrated this in respect of the different economic areas and ecological areas in France in the case of pot chrysanthemums. That was also an aspect that one must bear in mind when reflecting on characteristics and their importance.

26. Dr. von Pechmann stated that the comments made by the previous speaker and also the slides that had been shown had made it clear to everyone that the term "important characteristic" could not be assessed in the abstract but only in respect of the economic importance of the species concerned. It had also been said that account must be taken of the fact that a smaller or a bigger

distance to known varieties had to be respected depending on the species. That also seemed quite logical to him if it were remembered that the economic importance of the various species could also turn out quite differently if a differentiation were made. It was therefore his opinion that in relation to the question of what was an important characteristic within the meaning of the Convention, the applicant should also advise the Office that a new variety represented special economic progress with respect to that small change. The question of the place where growing or breeding was carried out had also been mentioned in that context. It had been said that certain changes in location could frequently have a decisive influence. In a case of that kind the applicant should inform the Office of that circumstance since a minor characteristic could in such circumstances represent a quantitatively important characteristic for the economic importance.

27. Dr. Lange (ASSINSEL) took a position as regards the view expressed by Dr. von Pechmann according to which the lack of the dependency principle in plant breeders' rights meant that the term "important" had to be interpreted differently than in the past. He did not share that view and gave the following grounds. The requirement of dependency within the meaning of patent law was that a more recent patent made use of essential inventive characteristics of an earlier patent and could not be carried out without making such use. However, where a new breeder's right was concerned this was not at all the case. Once a new variety had been created, it was no longer necessary to use the earlier variety. The development of a new variety through plant breeding meant that as soon as the new variety had once been created, the earlier variety that had been incorporated became superfluous from that moment onwards. The economic pointlessness of reproducing the breeding process, that is to say further use of the previous variety, was inherent in plant breeding in the majority of cases, contrary to technical inventions. That therefore showed that the principle of dependency was not lacking under plant breeders' rights without good reason. Indeed, breeders did not want dependency, but desired to be free to use the variety for further breeding work. He therefore wished to utter an urgent warning against the proposal made by Dr. von Pechmann, to use the interpretation of the term "important characteristic" as meaning a characteristic that was important for the economic value of the variety, to compensate for the lack of the dependency principle under plant breeders' rights.

28. Mr. Elena remarked that the point made by Dr. Lange was clearly taken into account in the wording of the Convention.

29. Dr. Troost remarked that Mrs. Löscher had twice used the word improvement of a variety. He would be interested to know what the word "improvement" meant in that context.

30. Mrs. Löscher said that she had used the word "improvement" as a result of the terminology that had been used in discussions with the breeders and with the growers. Where she had spoken of "improvement," it had concerned a different variety which at the same time constituted an improvement for the market. She had wished to make it clear that a distinctness characteristic that was utilized could also quite well incorporate an improvement and that it was not always simply a question of competition or of undermining plant breeders' rights.

31. Dr. von Pechmann replied to Dr. Lange's question by saying that problems could indeed arise in breeding due to the fact that no dependent right existed and that a new breeder could make use of a characteristic that was insignificant for the economic value of the basic material in order to escape from the scope of protection of the first-mentioned breeder's right by obtaining variety protection, whereby all the characteristics that had led to the first variety receiving protection had been maintained. What happened here could not happen in the case of a patent as a result of dependency. In that case the characteristics of the previous patent would be maintained and the additional characteristics protected; there would however be dependency. In the case of plant breeders' rights, the significant developments that had led to protection for the first variety would be maintained for the new variety and simply supplemented by additional characteristics, for example a small change in the leaf shape that was of subsidiary importance for the sale of the variety concerned. In that way, the breeder of the first mentioned variety was in fact deprived of his reward and he had gained the impression that particularly in the case of breeders of ornamental plants, the term "important characteristic" had to be interpreted as a characteristic that was important for the quality of the variety concerned.

32. Mr. Winter continued the discussion by pointing to the dangers that could arise where the assessment of the characteristic and of the distinctness were made subject to the subjective assessment of the applicant breeder or where the authority awarding breeders' rights was given discretionary powers that lay outside its area of competence since it concerned the economic assessment of the new variety. That area was reserved for the breeder, under variety protection law, in his capacity as owner of the rights. It was within the breeder's own responsibility to see how he marketed his variety and whether he could market it. He wished therefore to warn against taking into consideration the subjective assessment of the breeder or of the examiner at the plant breeder's rights Office as a basis for discussion on a possible solution to the problem.

33. Dr. Böringer feared that a complete misunderstanding was creeping in. No one wanted that at which Mr. Winter had hinted. What was wanted was the following: UPOV-established characteristics irrespective of their economic relevance. In addition to that, it was a fact in the case of ornamental plants, however, that many of the established characteristics did indeed have a subsequent economic consequence for the variety. In a theoretical discussion, it was very difficult to make this connection clear. The varieties would have to be looked at in field trials or in the greenhouse, where many of the problems would resolve themselves.

34. Mr. Royon felt that it might be a suitable moment for him to inform UPOV that CIOPORA would welcome it if the government experts, when working out new measurements or new criteria for the definition of minimum distances between varieties, made no decisions without first contacting the associations represented at the meeting. A permanent dialogue could then be established, species by species, and the associations could be given the possibility to appoint two or three or more experts, expert breeders, to give their opinion and share their experience with the government experts. CIOPORA believed that in that way misunderstandings could be avoided and, perhaps any problems could be solved in a mutually satisfactory way.

35. Dr. Mast, referring to the closing remark of Mr. Royon, mentioned that it had long been the practice for UPOV to submit all new or revised Test Guidelines to all of the professional organizations for comment. The organizations were given ample time to make their comments. If any were made, the relevant Test Guidelines were reconsidered by the competent bodies of UPOV, namely the Technical Working Parties and the Technical Committee, and all observations were then very conscientiously studied. Dr. Mast felt that he had to note that the number of comments received was sometimes disappointingly low. He said that he would appreciate it if the professional organizations would make better use of their opportunities and if any comments made could be sent to the Office of UPOV in time.

36. Mr. Royon said that he would like to reply to the Vice Secretary-General's remarks. He fully agreed with Dr. Mast that it was sometimes very difficult to obtain comments on documents from breeder members of the associations. He suspected, however, given the specific difficulty of the matter under discussion, that it would be much more effective if meetings could be arranged at the testing sites, in the fields or greenhouses, between government experts and breeder experts. He believed that breeders were far more at ease in a greenhouse than in front of a piece of paper.

37. Mr. Elena commented that Mr. Royon's point was perhaps one that had to be dealt with at the national level.

38. Mr. Hutin (France) wished firstly to state that the technical work carried out within UPOV was not removed from national reality in the States and that, indeed, they were often a simple synthesis of consultations that had been held at national level between professional and government experts. He believed that, in other cases, involving bilateral cooperation agreements, there was also a standing concern to involve the breeders having varieties under study in the examination which could be carried out in another country. This desire existed in all the member countries of UPOV, despite what was felt by some, even though the decision-taking procedures adopted involved private experts in some cases and did not in other cases. Mr. Hutin noted that, in any event, in all the member countries of UPOV, breeders' associations were able to give their comments and thus influence the development of policy in that field.

Furthermore, he wished to say, following the preceding discussion, which had seemed to him to introduce, as emphasized by Dr. Böringer, a certain degree of confusion, that the technical studies were not detached from the general policy on protection. The concern of protection was to defend and to protect the breeders' rights. Underlying all such work was a concern, on the part of the government experts, firstly to ensure that what they were going to protect did in fact constitute breeding work, without judging whether it was better or worse, and secondly that the work could be defended once it had been recognized. An effort should likewise be made to make the system more moral in that it did not promote 'plagiarism', that is to say breeding work carried out solely to 'plagiarize' and thus get around existing rights. Mr. Hutin believed that those were the principles and that if the characteristics used in practise additionally had an agronomic or commercial value, it was but a coincidence. It was in no case a fundamental element of the system.

39. Dr. Mast said that meetings with breeders did take place within UPOV and in the UPOV member States, and not only at the national level. He remembered having heard that Mrs. Löscher had conducted a meeting last year in the Federal Republic of Germany, concerning *Elatior Begonia*. Representatives of the trade and breeders had been invited to that meeting, representatives not only from the Federal Republic of Germany but also from other countries for which the authorities of the Federal Republic of Germany did the testing work. So contacts existed, and they would continue to exist in the future.

40. Dr. Leenders agreed that such contacts were valuable for all sections. In connection with the difficulty of getting comments from the breeders on Test Guidelines, ASSINSEL had advised UPOV that it would be helpful if it could be informed of the reaction of the UPOV experts to the comments made. He recognized that this was difficult and knew that the meetings sometimes took place some considerable time after the comments had been sent in. He was confronted, however, with the problem that it was rather discouraging for members who had submitted comments to find out afterwards that they did not achieve very much. That might be quite reasonable because one did not always achieve what one proposed, but sometimes breeders would like to know why certain suggestions were not followed. Dr. Leenders said, in conclusion that he would like to make a plea that contacts similar to those established in respect of *Begonias* should also be established for some of the crops bred by members of ASSINSEL.

41. Dr. Mast commented that Dr. Leenders was right in saying that somebody who had made an essential remark should receive an answer. The difficulty lay in the fact that decisions were sometimes taken by the competent UPOV authorities a very long time after the request had been made. The procedure for adopting the Test Guidelines was indeed very slow. Dr. Mast assured Dr. Leenders that he had understood his request and had taken note of it.

42. Mr. Bartholomae (AIPH) posed the question in that connection as to how far the formulation of Test Guidelines had an influence on protection and thus also on the distances for variety protection. As far as he could see, the Test Guidelines were not necessarily a yardstick whose characteristics could be used to assess what was new or not and what represented an important characteristic or not. The Test Guidelines referred indeed only to what was to be tested and to what was laid down for the test. Where a breeder referred to a further characteristic that was not included in the Test Guidelines such characteristic must also be included in the test and an assessment made as to whether it was important for distinctness. The formulation of the Test Guidelines was therefore simply an aid to guiding the test somewhat. The Offices could probably not avoid, however, testing the variety in respect of a further characteristic. He would like to see it clearly set out that Test Guidelines were not exhaustive and did not lay down all characteristics once and for all.

43. Mr. Elena said that he believed that the list of characteristics included in the Test Guidelines was not fixed for all time. He invited Mrs. Löscher to clarify the situation regarding ornamentals.

44. Mrs. Löscher confirmed that Test Guidelines were not frozen; they could be extended. They could also be reduced. The Test Guidelines, as laid down for each species were basically decisive for the test, however the general introduction to those Test Guidelines was also to be taken into account. Basically, the characteristics were fixed. It was only when new aspects arose that further characteristics could be needed for distinctness or where a characteristic was particularly emphasized by an applicant was it possible to extend the scope of the test.

45. Mr. Simon (France) felt that the last statements that had been made were important. It was his view, on reading the Test Guidelines, that there existed an ambiguity which should probably be clarified. For some, they constituted lists of characteristics defining the rules of distinctness between varieties in order to arrive at a concept of novelty. For others, they were simply a methodology that had been set up by the experts and by UPOV for the purpose of describing varieties. Those two concepts were therefore different. Mr. Simon was not sure that all the Test Guidelines had been formulated for the purpose of defining rules of distinctness to arrive at a concept of novelty. It was true that in the preambles or in the general remarks rules of distinctness had been defined with the help of significant statistical differences that were generally applied to cross-fertilized plants. But in the case of self-fertilized plants, Mr. Simon was not sure that the classes that had to be observed in order to say whether one variety was different from another had in fact been defined in all cases. Thought should probably be devoted to that matter.

46. Mr. Elena, noting his agreement with what Mr. Simon had stated, said that he believed that only the list of characteristics had been fixed and not the minimum distances.

47. Dr. Mastenbroek declared that the members of ASSINSEL were of the opinion that the lists of characteristics in the Test Guidelines were not exhaustive. It should be possible to use, on the national level, a characteristic for distinguishing between two varieties that was not listed in the Test Guidelines, on the condition, of course, that the new characteristic was reliable. He had said earlier that the members of ASSINSEL would like to have additional distinguishing characteristics. He would like to stress again that for many crops these were urgently needed.

48. Mr. Elena thought that the lists of characteristics were open and that it was for the national authorities to decide whether to use appropriate additional ones. Mr. Elena went on to say that he would like, before concluding the discussion on the vegetatively propagated species, to give an opportunity to Mr. Brand, an expert from the French Office, to present a case related to carnations.

49. Mr. Brand (France) said that the French Delegation had decided to present an example (figure 1) in respect of varieties of carnation that were vegetatively propagated in order to illustrate the comment made by Mr. Simon on the Test Guidelines where, effectively, principles for identifying varieties had been laid down but not in fact any minimum distances between levels of expression of characteristics. The example that had been chosen demonstrated the problem all the better since the setting of minimum distances was much more difficult in the case of quantitative characteristics than in the case of qualitative characteristics.

Mr. Brand explained that three varieties of white carnation, of American type, were involved for which it was impossible to make a morphological distinction when observing flowers in macroscopic state. However, if the quantitative characteristics of the Test Guidelines for carnation were used, and its qualitative characteristics, characteristics for differentiating between the three varieties could be found. Characteristics in respect of which the three varieties appeared to be distinct had been underlined. In the case of variety A, the problem had been resolved quite easily in view of the fact that the shoulder of the styles was present whereas it was absent in the other two varieties. From the point of view of the philosophy, it could be said that the variety was distinct from the two others. However, when approaching the quantitative characteristics it could in fact be seen that variety C could be distinguished from variety B by means of three quantitative measurements also characterized by their standard deviation. The other problem was that no minimum distances had been laid down for those quantitative characteristics and, it was therefore in fact a very subjective matter to decide that the two varieties were distinct. That very short example therefore illustrated the difficulty of laying down minimum distances for characteristics even where they were recognized by the UPOV Test Guidelines.

50. Mrs. Löscher added that she had gained the general impression during the morning that it should perhaps be said that the Test Guidelines did in fact contain something on minimum distances, particularly in connection with the General Introduction. Indeed, those documents quite clearly stated what was

to be done where two varieties could be distinguished by means of a qualitative characteristic or where two varieties could be distinguished by means of a quantitative characteristic. It became rather more difficult, however, in the case of ornamental plants to lay down in advance the minimum distance as regards the characteristic of color. It was difficult to forecast how far a variety should differ from another variety as regards the characteristic of flower color. The reason was that no color chart was available that comprised the same distances from one example color to the other. If such were the case, it would be possible to lay down minimum distances between varieties for that characteristic.

51. Mr. Elena thanked the various speakers for their clarifications. He proposed that the discussion on vegetatively propagated species should be closed and that the meeting should move on to discuss the problems relating to sexually reproduced species, beginning with those that were self-fertilized.

52. Mr. Merchat (ASSINSEL) said that he had prepared three examples for self-fertilized species showing that it was sometimes possible to define minimum distances in a fairly simple way. These examples would perhaps enable the discussions to progress.

Mr. Merchat proposed as his first example the characteristic "cross section of the pod" in the case of French beans (figure 2). He referred to the way in which the characteristic was to be described as laid down by the guidelines and the way that could be adopted to determine a minimum distance using those descriptions.

Mr. Merchat proposed a second example concerning the color of the foliage in the case of peas (figure 3). He noted that in the new Test Guidelines there were only three categories (yellow green, medium green and blue green), whereas the former Test Guidelines had contained six, the additional colors being light green, dark green and emerald green. He explained the way in which a minimum distance could be determined with the aid of the six color notations.

The third example that Mr. Merchat proposed for thought made use of the time of flowering in the case of peas and in the case of French beans (figure 4). It concerned the characteristic "number of days from sowing to appearance of first flower" in respect of 10 percent of plants. He explained that a minimum difference of one day was acceptable for distinctness in the case of peas whereas in the case of French beans a difference of three days at least was needed due to the variability of the conditions under which its flowers appeared.

53. Mr. Simon wished to add a few words to what had been said by Mr. Merchat. It was to be seen that, in order to pass judgement on the identification of a variety and on the possibilities of distinguishing it, it was necessary to study the varieties characteristic by characteristic, and even state of expression by state of expression, for each of those characteristics.

For a variety belonging to a self-fertilized plant, the expression of a characteristic was represented by states that could be observed within a characteristic. Mr. Simon gave the example of the density of an ear which may present a very lax state of expression, intermediary states or a very dense state.

The expression of quantitative characteristics could be presented schematically in the form of a histogram of the frequency of the different states of expression appearing in the plants observed (figure 5). That histogram could be evaluated, if it could be assimilated to a probability curve, with the aid of two parameters: the mean and the distribution in relation to that mean.

That meant that when two varieties had to be compared with each other, the following examples could result (figures 6 to 8). Those figures could represent the assessment of the size of the variety or varieties under examination. In those figures one could see a more or less large overlap or an absence of overlap between the observed distributions. Those distributions and their overlap were related, according to Mr. Simon, to the notion of small

distances (greater number of protected varieties; increased probability of overlap of observed distributions of states of expression of characteristics) and big distances (lesser number of protected varieties; reduced probability of overlapping of observed distributions of states of expression of characteristics).

Mr. Simon felt that the problem was knowing which minimum distance had to be chosen to avoid making errors when the breeder had to defend the quality of the title he had received. To facilitate discussion, Mr. Simon presented in tabular form (figures 9 and 10) an approach to assessing distinctness between varieties used in France. He explained that figure 9 represented the various states of expression of varieties of wheat or barley for the characteristic "density of the ear" from state 1, that would be the "lax" state, up to state 9 the "very dense" state. Diagonally, were to be found the various states of expression laid down in the Test Guidelines. For each state of expression of the described characteristics, areas of non-distinctness had been established as a function of past observation and of experience that had been gained. For state 4, for example, minimum distances were required that did not take into account states 2 and 3, or 5 and 6. Those areas of non-distinctness varied depending on the species, the characteristics examined and the various states of expression observed within each characteristic. If a different characteristic were taken, that was much more variable, such as the coloration of the coleoptile (figure 10), it could be seen that the minimum distances had to be greater if one wished to distinguish with maximum certainty between the varieties. The question was therefore whether those minimum distances could be reduced or, on the contrary, they should be increased to guarantee the security of the owner of a title of protection.

According to Mr. Simon, the size of the non-distinctness areas to be chosen in order to decide on a line of conduct between "big distances" and "small distances" would appear one of the most important factors in the debate. Whatever the method chosen (he tended to be in favor of big distances), it was essential to ask the question, once the observations had been made and the distances noted, what degree of originality of the new material presented would make it possible to say that that material was located outside the field of scientific 'plagiarism' or of copying; it mattered little whether the degree of originality of the material submitted had positive or negative aspects.

Where the degree of originality was apparent to those responsible and to the national or international experts, in the absence of differentiation using the distances laid down, the examination of new characteristics or the taking into account of a range of small differences (small distances) regained importance particularly where, in the last hypothesis, the sum of small differences could be backed up by a sophisticated identification method.

54. Mr. Guiard (France) said that he proposed adding to what had been said by Mr. Simon by referring to the species maize for which the parent lines were dealt with in terms of distinctness, homogeneity and stability as for self-fertilizing plants. The fluctuation of certain characteristics was well known and it was possible in that case to define minimum distances. Two examples would illustrate what he was saying:

- for the characteristic of anthocyanin coloration of the glumes of the cob, which was one of those given in the Test Guidelines, the minimum distance was extremely simple to define, that is to say whether pigmentation was present or absent. On the other hand, fluctuation of the intensity of anthocyanin coloration when present was much more important.

- for the characteristic of the hairs on the margin of the sheath, fluctuation was much greater. By taking into account both that characteristic and the homogeneity of the expression of the characteristic in the observed sample, the minimum distances obtained were much greater and could cover half of the scale (1 differed only from 7 and 9 differed only from 3). It was difficult to consider that characteristic as an important one for distinctness.

Those considerations concerned the parents of maize hybrids, that is to say material with very high homozygosis.

In France, study of a hybrid was first based on a detailed examination of the parents and of the hybridization formula that was used. That provided good knowledge of the genetic variability of the observed characteristics, which would be found again in the hybrid.

Moreover, as regards the hybrid, a description was made plant by plant as in the case of cross-fertilized fodder plants (cocksfoot, tall fescue). The data thus obtained enabled both the mean value and the standard deviation for each quantitative characteristic to be calculated and also the distribution of each qualitative characteristic over the various classes to be obtained. The description of the hybrid was supplemented by studying the descendance of a certain number of characteristics whose genetic determinism was known, as a function of the description of the parents, such as the anthocyanin coloration of the cob, for example.

Mr. Guiard considered that it was possible to correctly define the majority of hybrids under examination in France. There certainly remained cases that were difficult to examine, simply because they concerned material with closely related genetic bases. He felt that in such cases, the proposals made by Mr. Simon at the end of his presentation should be adopted. According to Mr. Guiard, a possible solution was the increase of minimum distances in respect of the hybrid parents to ensure that problems with the hybrids became increasingly less important and less frequent. Indeed, it would even be possible to move towards the issue of plant breeders' certificates for lines alone and no longer for hybrids.

55. Mr. Simon said that it was obvious to him (but he did not know whether his view would be shared by everyone in the room) that if a move were made towards very small differences, it would be necessary to define very stringent rules on homogeneity. On the other hand, if the trend was towards relatively big differences, the approach to the question of homogeneity could probably be much more flexible. Mr. Simon emphasized the link between minimum distances, big or small distances, and the rules on homogeneity.

Mr. Simon asked Mr. Brand to make a few observations as regards vegetable plants.

56. Mr. Brand demonstrated the case of a comparison between two F_1 hybrid varieties of tomato to illustrate the fact that, in the case of hybrids, even in a self-fertilized species with F_1 hybrids, non-distinctness could be achieved by using all the characteristics in the Test Guidelines, including the quantitative characteristics (figure 11). An examination was carried out in 1982 and 1983, which was unable to distinguish between the two varieties. Mr. Brand wished to illustrate the impossibility of distinguishing between those two varieties not only on the basis of the qualitative characteristics, but also using quantitative characteristics (figure 12). Four trials were conducted, representing a total of 180 plants observed for each variety and 210 fruits examined for each variety. When comparing the results of the quantitative examinations carried out, it was to be seen that the two F_1 hybrids were difficult to distinguish by their quantitative characteristics and that even the setting of very low minimum distances would not solve the problem. Frequently, the reliability intervals of the mean values of the data recorded for each variety overlapped, equally for the date of flowering, the level of determination (that is to say the number of inflorescences at the time the varieties are determined), the ratio of fruit height to diameter, the number of locules, length of peduncle and mean weight of fruit. In fact, the two F_1 hybrids are of different genetic structure. The parents were not identical and the two F_1 hybrids dealt with were therefore phenotypically identical but most certainly genetically different. Under the present French system the impossibility of examining the parents, in the case of tomato, did not make it possible to protect those two materials. Had the same system been adopted, as was used in France for maize, the result would perhaps have been to protect the two materials by studying the lines and proving that they were different. In that case, it could be seen that even the laying down of very small minimum distances would not have enabled a distinction to be made between the two varieties although they were genetically different.

57. Mr. Denton (COMASSO) said that he would like to ask Mr. Simon to explain his reference to minimum distances that were sufficient to define the "originality" of a new variety. Mr. Denton wished to know whether "originality" had a meaning separate from that of distinctness as established by the actual test and whether it was in fact something of a more philosophical nature than the pure establishment of differences.

58. Mr. Simon replied that he had viewed it from the following example. A complete study was made, using the characteristics listed in the UPOV Test Guidelines for examination, with minimum distances for each state of expression of the observed characteristics. The conclusion could be reached that the two varieties, the new one and the standard, were not sufficiently distinct for each of the characteristics examined. Novelty that one was not able to perceive by means of the characteristics in the Test Guidelines might constitute an originality with regard to the existing variety. If small distances were adopted, there would certainly be no great problem. However, if large distances were adopted, the results could well be that two varieties would not be distinct within the meaning of the Convention but, nevertheless, the novelty would be original. Mr. Simon explained that it was for that reason that he had put out the idea of making a further study to check whether the variety in question was original and worthy of being recognized as 'new' within the meaning of the Convention.

59. Mr. Hutin wished to make a further comment on the basis of the comparative examples given by Mr. Brand as regards tomato hybrids and by Mr. Guiard as regards maize hybrids. Comparison between those two examples proved that one could reach different conclusions starting from varieties that gave identical phenotypical results, if one considered not the phenotypical aspect of the plants but their genetic structure. That was a very important debate since in one case, that of tomato, where only the phenotypical aspect had been taken into account, it had been concluded that a distinction could not be made between the varieties; in the case of maize, where the approach was a much wider one, comprising the phenotypical description and also recourse to genetic structures, it was possible to reach the conclusion that the varieties were different. It had not to be forgotten in the technical examination that the descriptions that one made were closely linked and interacted with the place at which they were made. If no difference was observed at the place of examination in the case of Mr. Brand's tomato varieties, it meant that no conclusion could be drawn. Perhaps the differing genetic structure of the two hybrids could result in a completely different behavior of the two varieties in a different place and, therefore, although there was no possibility of distinguishing between the varieties at the place of examination, there could be an overriding interest in the second variety being effectively recognized as different. Mr. Hutin believed that there was a basic problem: that of deciding whether priority was to be given in assessing novelty to the phenotypical aspect of the varieties or to their genetic differences. That problem had never been resolved.

60. Dr. Loden said that he also wished to raise a question concerning the examples given by Mr. Simon. Taking a hypothetical case, Dr. Loden had no problem if 1 to 5 was the minimum distance needed on the scale to establish with an adequate degree of confidence that two plants were different. He would have a problem, however, if there was an arbitrary decision that the distance had to be moved to 8 or 9 on the scale in order to make it easier to identify varieties, thus reducing the number of varieties that could be released from the same genetic background.

61. Mr. Simon replied that, where qualitative characteristics were examined one could work within a scale from 1 to 9, covering the full exteriorization of a given characteristic. As an example, Mr. Simon quoted the attitude of a leaf. Such an attitude could vary from erect to drooping and the varieties could therefore be described using a scale from 1 to 9, with the intermediate values 3, 5 and 7, and a decision could be taken within the framework of that scale. On the other hand, where quantitative characteristics were examined, such as early growth or the height of the plant, Mr. Simon shared the view of Dr. Loden that one should not limit oneself to an over-restrictive 1 to 9 or 1 to 5 scale. Above all, it was a matter of recognizing the differences between varieties and to determine whether it was possible without risk of error to distinguish between them within the meaning of the Convention.

62. Mr. Hutin said that he went along with what Mr. Simon had just said but believed that there was a further fact that could reassure Dr. Loden. The criterion to be taken into account when laying down the minimum distances was that of the validity and reliability of showing up those distances, and minimum distances should not be manipulated to satisfy other considerations.

63. Dr. Loden thanked Mr. Simon and Mr. Hutin for their explanations and assurances.

64. Mr. Hutin wanted to know the reactions of the non-governmental organizations on the question of what should constitute the basis for judging novelty. Was it the phenotypical structure of the varieties or was it their genetic structure?

65. Mr. Kiss (ASSINSEL) replied that ASSINSEL had raised the matter in writing in 1975 and had explained that it was the genetic part, the line, that was of prime importance for a hybrid. UPOV had given a negative reply. Mr. Kiss stated that he was very satisfied to note today's considerable evolution in that direction. ASSINSEL had long been demanding that maize hybrids be characterized by lines and, principally, by the way in which they were associated. The possibility of describing hybrids would be maintained, but in fact they were characterized by their components. In the case of maize, there were lines that had dominant phenotypical characteristics and, in view of the fact that UPOV did not examine, or did not require examination, of agronomic characteristics, there could be two hybrids from the same male parent, resembling each other from the phenotypical point of view, but whose value was totally different.

66. Mr. Merchat wished to emphasize the great importance, when defining minimum distances, that could be assumed not only by national experts but also by the professional experts. He wished to associate himself with the stance taken in the morning by Mr. Royon, who had actually said that the professional experts were in a position to assist considerably in achieving progress when they were properly consulted.

67. Dr. Böringer remarked in respect of the preceding statement that, in practice, his Office proceeded in the way that the speaker had demonstrated on the board. He believed that to be a good example of agreement between what was desired by the breeders and by the professional bodies and what could be done by the State authorities for the breeder and for plant variety protection. Secondly, he wished to make an observation on the statements made by Mr. Hutin and Mr. Kiss, whereby he had also to speak in that context of the legal aspects of the Convention. His understanding of the Convention was that a new variety was to be given protection when it was clearly distinguishable by one or more important characteristics from any other variety, that was to say without taking into account its genetic background. That applied in his understanding both for self-fertilized varieties and for hybrid and vegetatively reproduced varieties. For him, that was the basis for action. However, where a hybrid variety was initially not able to be distinguished from another hybrid variety in its characteristics, despite the fact that the genetic background was clearly different, it had to be possible in his view to find a difference by using additional characteristics. The only question that arose was how far one should go in taking into account additional characteristics and also where one should find them. In his view, it was not enough however to know, when comparing two varieties, that the breeding formulas were different.

68. Mr. Kiss begged to disagree with Dr. Böringer. Hybrids were composed of lines. If the lines were different, the hybrid had to be different. However, account had to be taken of the fact that in certain lines it was the morphological characteristics that were dominant and, at first view, the distinctness could not be seen in the field. However, if it were looked for it could be found. What was unfortunate in the whole proceedings was that the UPOV rules were applied by some countries to prevent registration in the catalogue.

69. Dr. von Pechmann said that the statement made by Dr. Böringer had been particularly interesting for him since there had to be awareness of the fact that plant variety protection constituted protection of a product; the question of how and by what process the product concerned had been manufactured had for that reason to remain secondary to the properties of the product itself. The same question arose in other fields of industrial property, such as patents, and had therefore been very interesting for him as a parallel case.

70. Mr. Kiss wished to emphasize that, in the case of maize, there could be two hybrids which resembled each other closely, from a morphological point of view, during vegetation, but which from an agronomic point of view were totally different, equally as regards yield and all the rest. However, UPOV did not take into account agronomic characteristics. Mr. Kiss stated that he was in agreement with the French proposition of no longer protecting hybrids but only lines.

71. Mr. Elena proposed that the discussion on the self-fertilized species should be closed. He invited Mr. Guiard to open the discussion on the cross-fertilized species.

72. Mr. Guiard felt that for cross-fertilized varieties an example could be taken from the fodder plants, such as cocksfoot or tall fescue. He thought that the various Test Guidelines that had been drawn up were sufficiently exact to define a certain number of minimum distances for the chosen characteristics. He wished to quote as an example the quantitative characteristics for which, in view of the mode of observation applied, a mean value and a standard deviation were obtained. Moreover, the probability threshold had been fixed at one percent. Once a quantitative characteristic had been effectively observed in a quantitative way, that was to say subject to measurements, the minimum distance was defined by the very principle of observation. For the qualitative characteristics observed qualitatively according to the scales from 1 to 9, there was a system of non-parametric tests, constituting a conventional tool, with a probability threshold of one percent, which also enabled the minimum distance to be defined by the method itself. A question could arise in respect of quantitative characteristics when assessed qualitatively on the 1 to 9 scale. Mr. Guiard believed that the problem had been fully dealt with in the document drawn up by the Office of UPOV. In such a case, a number of difficulties could be met when fixing the minimum distances. He wished to add that that context indeed showed the importance of the degree of homogeneity in defining minimum distances and likewise in the fluctuation of characteristics. He had no specific examples to give for that type of characteristic but felt that it was worth a study.

73. Mr. Duyvendak (Netherlands) said that he wished to draw attention to a few difficult problems of which participants might or might not be aware.

The first difficulty he wished to mention arose because the fluctuation of a character was used as a measure to define a sufficient minimum distance. Measurement required the use of mathematics. Because mathematics were so difficult, it was very tempting to leave that work to other people. Mr. Duyvendak wished to advise against doing that because even very simple methods could lead to some very peculiar conclusions. He gave examples of some problems he had encountered, and concluded that results obtained by using mathematics should always be treated with common sense.

Mr. Duyvendak explained that it was the fluctuation of the character that ultimately defined the reliability of distinctness. So far, no other measure was available. Distinctness had to be clear and to be clear it had to be reliable; therefore mathematics were needed because probability levels had to be defined. Probability levels were normally determined on the basis of comparisons of measurements of plants in trial fields. Normally the fluctuation between replications of the whole trial field was the yardstick of what constituted a reliable difference. Currently, the heterogeneity of varieties, particularly in the cross-fertilized crops, was causing very great difficulties. What was happening was that the fluctuations between replications were getting larger and it was becoming less and less possible to distinguish varieties because they were not sufficiently homogeneous, even though many of the varieties included in a trial had previously been found, according to the common definition used, to be so. Such was the case for many grasses, clovers and other crops and it was very difficult to explain to breeders. Mr. Duyvendak asked those breeders who were involved to take note of that problem.

74. Mr. Brand wished to present the example of a cross-fertilized species, onion, both to demonstrate the limits to the use of physiological characteristics and the danger of setting minimum distances that were too small.

Mr. Brand explained that a study had been made for three years of two onion varieties, "Hysol" and a new variety, that were of population-type genetic structure, that was to say comprising a great variation in phenotypical and morphological characteristics. The new variety had been presented as a selection from the "Hysol" population having a higher dry matter content. The examination carried out in 1981, 1982 and 1983 had shown no distinctive characteristic between those two materials over the whole of the morphological characteristics or other physiological characteristics such as early maturity or bulb conservation. All that had been noted had been a slight difference in the dry matter content (figure 13). During the final two years, much more sophisticated tests had been carried out to attempt to assess the slight difference in dry matter content between those two varieties (figures 14 and 15).

Mr. Brand felt that in view of those experimental results, one might ask how the minimum threshold of distinctness between two varieties, that is to say the minimum distance, was to be determined. It might also be asked what the reliability was of such a physiological characteristic for a cross-fertilized species the populations of which were subject to great variability, and whether one was entitled for UPOV-type studies to carry out numerous physiological tests demanding a very accurate evaluation in order to show up the difference between the two varieties. It might also be asked with what guarantee one could in fact use a physiological type characteristic using a DUS type methodology. It was certain that the difference, albeit very slight, in dry matter content between the two varieties effectively represented an improvement for the industrial user of those varieties. However, the difference was first very difficult to demonstrate and secondly very slight. The question therefore arose of the reliability of the protection of such a difference and whether, in the case of a dispute, the observed difference could be demonstrated again with a nevertheless fairly simple methodology.

75. Mr. Elena thanked all the participants for their valuable contributions and closed the discussion on "minimum distances between varieties."

76. Mr. Rigot believed that the first part of the meeting had shown the complexity of the problems and the usefulness of discussing them. He gave the chair to Mr. Heuver, Chairman of the Administrative and Legal Committee, for items 3 and 4 of the agenda, "International Cooperation" and "UPOV Recommendations on Variety Designations."

INTERNATIONAL COOPERATION

77. Mr. Heuver (Chairman of the Administrative and Legal Committee) opened the discussion on "International Cooperation" with the following words:

"You have before you document IOM/I/4 in which the Office of the Union has summarized in an excellent way the achievements of UPOV in this field and in the related field of harmonization and has given a complete review of the possible options for the future. You are also well informed on this subject, since the achievements of UPOV in the field of harmonization and cooperation affect the daily operation of the plant variety protection system in all its aspects. Many of you have contributed to the work which led to some of those achievements. In this respect, mention should be made of the participation of the interested organizations in some of the sessions of the former UPOV Committee of Experts on International Cooperation in Examination and of the well-established consultation procedure concerning the Test Guidelines. You are also well informed about the developments in this field through "Plant Variety Protection," the Gazette and Newsletter of UPOV.

"The document on the table is, however, dated June 2, 1983, and since its drafting there have been two major events on which I should report to ensure a meaningful discussion. The simplest way is for me to read out extracts from the draft detailed report on the seventeenth ordinary session of the Council, which was held last month.

"The first extract concerns a group of five countries. It reads as follows:

'The representatives of the Federal Republic of Germany, Denmark, France, the Netherlands and the United Kingdom had continued their efforts towards closer cooperation. It was now planned to introduce in the bilateral agreements between those States provisions to the effect that each of those States would automatically use the results of tests carried out by any other State of that group, in respect of the largest possible number of varieties of the largest possible number of species for which more than one national examination structure existed. In other words, the aim was that there should only be one single examination for each variety. To that end, the examination methods were to be standardized even further. It was moreover envisaged that examination would be increasingly centralized with the services of a single member State that would carry out such examination on behalf of the services of all the

other member States participating in the cooperation arrangements, particularly for the species to which protection was to be extended in future by the States participating in the arrangements. Finally, work was in hand towards drawing up a standardized application form.

'Such cooperation should not be limited to the protection of new plant varieties but should also concern the national catalogues of varieties approved for marketing. Once such cooperation had taken shape, it would be necessary to examine the conditions for participation by any other interested member States of UPOV.'

"Last, but not least, during the session, Mr. Obst, from the Commission of the European Communities, made the following statement to the Council:

'The European Communities had for some years already concerned themselves with a number of problems that resulted from the coexistence at Community level of a common market for propagating material and national systems of new plant variety protection leading to the granting of titles of protection whose effect was limited to the national territory of each State. That situation had recently led the Commission of the European Communities to make an official proposal to the Community Member States and to the professional organizations set up at Community level.

'The Commission of the European Communities was shortly to hold hearings of the Community Member States and of the professional organizations, which could possibly be extended and would, in any event, be held in close cooperation with UPOV.'

"The extracts which I just read out show that many developments are to be expected in the near future, and that the time has therefore come for an exchange of views with the organizations representing the breeders and the growers, who are the first and main beneficiaries of any progress made in the field of harmonization and cooperation."

Mr. Heuver invited the representatives of the organizations to speak to their comments on the subject of international cooperation. He asked the representative of CIOPORA to begin.

78. Mr. Royon explained that CIOPORA had not drawn up a document on the matter of cooperation. Nevertheless, on a number of occasions, it had communicated to UPOV and to the various national organizations its concern as regards the disparities that existed between the various national legislations, particularly as regards the definition of the scope of breeders' rights. It had likewise communicated its concern at the cost of prior examination, which it felt to be too high, even taking into account the provisions that had been elaborated over preceding years as regards the exchange of results and cooperation under bilateral agreements. Mr. Royon stated that CIOPORA maintained the observations it had felt necessary to make in the past in respect of these subjects.

Mr. Royon informed the meeting that, as regards the possibility of a supranational system, CIOPORA had approached the subject during various internal meetings. In view of the commercial structure of its members, in view also of the disparities that existed between the various national legislations, and as reflections on the problem stood at that time, CIOPORA felt that if a supranational organization was to be set up it would prefer a solution of the European patent (Munich Convention) type rather than a solution of the Community patent (Luxembourg Convention) type.

79. Mr. Heuver then invited comments from the representative of COMASSO.

80. Mr. Winter said that he wished, as the preceding speaker, to limit himself to setting out a small number of principles without entering into detail and without returning to the preparatory documents. COMASSO was grateful for every possibility of an exchange of ideas on the harmonization of national plant variety protection laws and on the creation of a uniform plant variety protection law with effect in a number of UPOV States. Much could be said, to be sure, as regards the individual provisions. The approach adopted by the "Group of Five," to expand the existing agreements on the conduct of variety

trials to constitute a centralized examination, was certainly not the wrong one. In this case also, however, care had to be taken to allow for the particularities of species and to avoid running on headlong. It was very good that steps had been taken along the path towards the ideal solution of a single plant breeder's right. It was likewise good that such an objective was being slowly approached and, finally, it was yet again good that the intention had been stated to progress along this path in close cooperation with the professional organizations.

81. Mr. Heuver then invited comments from the representative of FIS.

82. Dr. Loden said that FIS encouraged centralized testing on the basis of economy and as a step towards accomplishing the objective of a single application and a single grant. FIS also urged further economies in testing by the introduction of simplified tests for some of the smaller volume species, at least on a trial basis.

83. Mr. Heuver then invited comments from the representative of ASSINSEL.

84. Dr. Mastenbroek said that the feelings of ASSINSEL regarding international cooperation were expressed in part A of the Annex to document IOM/I/4. For the time being, it seemed that the best possible solution would be to extend the existing bilateral agreements into multilateral agreements. ASSINSEL therefore warmly welcomed the developments outlined by Mr. Heuver. Its members were, of course, anxious to learn how such an extension would work in practice and to what species it would apply. They were also anxious to learn how quickly it would lead to a complete harmonization of testing procedures.

85. Mr. Heuver then invited comments from the representative of AIPH.

86. Dr. Troost said that he would like to add to the comments submitted by AIPH and reproduced on page 3 of the Annex to document IOM/I/10. AIPH welcomed every effort to increase standardization, to simplify the application forms and to simplify testing. Dr. Troost believed that the legal problems relating to such matters would also have to be discussed. It was not only a matter of cooperation between the authorities examining varieties and granting rights. For the authority of one UPOV country to have the right to grant a title that the authorities of the other member countries had to accept would require implementing provisions in the national laws. It was good that several member countries intended to accept the results of a single examination, but it was necessary to go farther. It was interesting that the European Communities were working in this field, but the world was bigger than the European Communities. There were breeders and users of seeds in other countries. Dr. Troost thought, therefore, that such matters were not really for the European Communities to deal with. If they were preparing good documentation, however, he thought that the international professional organizations would be quite prepared to go to Brussels for discussions with them.

87. Mr. Heuver agreed with Dr. Troost that taking over test results was only a first step. Dr. Troost would be well aware, however, that it took a long time to change laws. Mr. Heuver considered that it was for that reason that the representatives of the five countries he had mentioned had decided to start in the way he had described.

Mr. Heuver then invited a more general discussion of matters relating to cooperation.

88. Mr. Winter addressed a question to the representatives of the five countries that had joined together in informal cooperation. He assumed that the use of examination results obtained in the plant variety examination was also planned in respect of variety catalogues. He wondered how one was to imagine the arrangements, what technical implications would have to be thought of, whether it should take place in every case, whether it affected bilateral agreements or their planned expansion, and whether the use of centralized trial results had been considered. He regretted to have a whole bundle of questions to put, but believed that they were easy to answer.

89. Mr. Heuver said that as Chairman of the Administrative and Legal Committee, and someone who was also involved to some extent in the matter of cooperation between "the Five", he would endeavor to reply to Mr. Winter's question, but he would also welcome a contribution from others involved in that matter.

In the first place, as far as the national lists of varieties were concerned there were some administrative reasons, in one country at least, for not taking over testing results for DUS, but it was hoped that those problems could be solved. In general the tests were the same as those for plant breeders' rights and the reference collections were the same.

90. Mr. Fikkert (Netherlands) said that, as far as national lists of varieties were concerned, one had to make the distinction between the results to be provided and the use of those results. "The Five" had reached the point that the results to be provided could be results from DUS tests in relation to granting plant breeders' rights, or in relation to national listing. The use of those results was, in principle, only for granting rights, so the country requesting the results would do so in relation to an application for plant breeders' rights in that country. Such a country could, however, unilaterally declare that it would also use the results received for national listing purposes.

91. Dr. von Pechmann spoke in that context of an individual case. It concerned a problematic clash of provisions. The UPOV Convention gave a practical possibility, where priority was claimed, of postponing the examination concerned in the subsequent country of application by four years. Where the examination subsequently came to a negative result in the Office of initial application, the question arose whether there was a right, under the UPOV Convention, to claim postponement of examination in the country of subsequent application and reappear after four years in that country with new material. He would be grateful if it could be explained to him how that case would be judged by UPOV.

92. Dr. Mast was not altogether clear as to the legal basis on which Dr. von Pechmann wished the answer to be given to his question--according to the law as it currently stood, according to the plan of "the Five," according to the plan of the Commission of the European Communities or according to some other plan. Under current law, a decision was taken on each application at national level. Where an application was refused in one State but the variety had not been offered for sale or marketed in a further State, an application could be submitted in that further State within four years, calculated from the marketing of the variety in the other country, and where the remaining requirements for protection were fulfilled variety protection could be granted. That new application would be judged quite separately from the earlier application; obviously, no priority could be claimed once one year had expired after the initial application. Where the result of the examination was positive, protection could still be granted in the second country. It was not clear whether problems would arise under the system of "the Five" or under any other future system. The basis for the current system was, however, the rule of the Convention under which a variety was allowed to be known in the country of application if it had not yet been marketed there at the time of the application. It might even have already been marketed abroad, but not for longer than four years.

93. Dr. von Pechmann referred to Article 12(3) of the UPOV Convention which in his opinion read somewhat differently. A breeder who claimed priority under Article 12(2) of the UPOV Convention had available a full four years in the country of the subsequent application following expiry of the period of priority in order to submit the additional documents and the necessary material required by the laws and regulations. In this he saw him the possibility of postponing examination for four years and the question arose whether the results of the trials obtained in the country of first application were also binding for the country of subsequent application. He wondered whether the Office in the country of subsequent application was obliged to base itself on the results obtained in the country of first application, four years earlier, in its decision on the application submitted to it.

94. Mr. Kunhardt (Federal Republic of Germany) pointed out that the case referred to by Dr. von Pechmann was currently pending in the Federal Republic of Germany. It had therefore perhaps not been quite clear what was meant and the reply given by Dr. Mast was of course correct under the circumstances. The question involved concerned a conflict between provisions and that was not directly referred to in the Convention; indeed it was undisputed that both under the Convention and under national law it was possible to submit seed for four years. In the individual dispute referred to the question was that of

using examination results from another country, and that question was regulated in the Federal Republic of Germany by national law. It had nothing to do with any agreements that might have been concluded bilaterally but rather it involved the interpretation of the corresponding provision that existed in that same law concerning adoption of examination results from another country and that was in conflict with the four-year time limit; such opposition did not exist in that form in the Convention but had to be decided in accordance with national law. He therefore very much doubted whether the question raised in the meeting by Dr. von Pechmann could usefully be discussed. It would indeed have to be fought out at national level.

95. Dr. von Pechmann felt that two provisions that indeed contradicted each other existed in that case, whereby the breeder relied on the superior law, namely the provision of the Convention, and would take the stance that in the case of conflict UPOV law would take precedence. Whether this were true was, in his opinion, a fundamental question of international law and he would be happy to hear Dr. Mast's view.

96. Dr. Mast explained that the question whether in the case of conflict the provision of an international treaty or a differing provision of national law could be claimed, depended on the national constitutional law of the State in question. There were States in which the principle was that only national law applied and in which any international provision had to be converted to national law. Other States would give self-executing provisions of international treaties precedence over national law, and other States again would place international provisions and national statutes on the same footing and decide the question of precedence in accordance with the general rules of conflict, for instance depending on which provisions were the most recent or the most specific. He wondered, however, whether in the case in point there really existed a conflict between the UPOV Convention and the German Plant Variety Protection Law. He was not well enough informed on the case to be able to form an opinion.

97. Mr. Fikkert said that he would like to point out that the right of priority was only available in relation to an earlier application, duly filed in another State. The material had to be furnished to that other State. Article 12(3) of the Convention referred to additional material to be furnished. As far as the taking over of results was concerned, the Netherlands authorities would not require any additional material. They would not deal with the application within the period of four years referred to in Article 12(3) unless the breeder so requested. As soon as the applicant asked them to proceed they would ask for relevant additional documents, but not for any additional material. Mr. Fikkert said that, in principle, he saw no conflict with the provisions of the Convention. He would like to add that the agreement would be arranged in such a way that exceptions were possible. The previous results would not always have to be taken over. There might be results that the second country would decide not to take over, for example relating to a 'variety' that appeared to lack homogeneity. If the breeder refined his product, Mr. Fikkert could imagine that the Netherlands authorities would not take over the negative report but would start a new cycle with a new application and the new material.

98. Mr. Royon wished to raise a question which he did not intend for immediate discussion but which he would like the experts to deal with during their subsequent meetings. It concerned the current situation where, under a bilateral agreement between two countries, country A carried out prior examination on behalf of country B. A breeder who had submitted an application in both countries instituted infringement proceedings in country B and in the course of the seizure procedure required to seize disputed plants presumed to be infringing in country B since it was obviously necessary for him to be able to produce evidence of the infringement. The best way to provide such evidence was to be able to plant the infringing plants side by side with the reference plants. Members of CIOPORA had found themselves faced in practice by the difficulty of taking as reference plants those located on the territory of another country since there were administrative difficulties and difficulties in having the procedure recognized to enable the experts that had been named in one country to go to another country, to enable the plants located in that other country to be considered as valid references for the first country, etc. Mr. Royon felt that it was a problem faced at present by various breeders and which deserved the attention of UPOV's experts.

99. Dr. Böringer remarked that he did not in fact wish to speak on the case mentioned by Dr. von Pechmann but nevertheless wished to draw the attention of the meeting to the second sentence of Article 12(3) of the 1978 revised wording of the Convention. A new sentence had been added by the Diplomatic Conference in 1978, which read as follows: "Nevertheless, that State" (i.e. the State in which priority was claimed) "may require the additional documents and material to be furnished within an adequate period in the case where the application"--and that was the important point--"whose priority is claimed is rejected or withdrawn." The inclusion of that sentence was the practical consequence of a certain method that had been devised by a number of breeders, namely to apply for a variety in country A and to submit material for examination in that country and then to submit a subsequent application, claiming the priority of the first application in country B and then to withdraw the application in country A; in such a case the variety could only be examined in country B after four years had passed. This would have given the breeders the opportunity to further improve their material, particularly as regards homogeneity, but still to claim the priority date of the first application and thus obtain an advantage over their competitors. The inclusion of the sentence that had been quoted was intended to prevent that method being used and was in the long term also in the interests of the breeders themselves.

100. Mr. Heuver asked whether there were any further comments, or whether the organizations all agreed with the line followed in UPOV regarding cooperation.

101. Mr. Urselmann (ASSINSEL) said that he was not sure that he had correctly understood what Mr. Heuver had said earlier. He had understood that it was being said that a breeder did not have the right, or at least had only a weak right, to apply for a trial in the second country if, for one reason or another, the first application had been refused. Mr. Urselmann thought that breeders liked to have the freedom to apply for a new trial. He had understood from the additional explanation given by Mr. Fikkert that it was only in certain circumstances that the breeder would have that right. Mr. Urselmann said that he would appreciate clarification whether breeders would have the freedom to apply for a new trial.

102. Mr. Heuver believed that Mr. Fikkert's statement had been correct. A breeder could always ask for a new test. If the breeder claimed that new facts existed, then normally in the Netherlands the authorities would agree to a new test. Mr. Heuver believed that the situation in the other member States was the same but it was a matter for each national authority to decide. Also, the breeder could file his first application in the country of his choice. The other countries party to the new bilateral agreements would wait until the test had been completed in the first country, where the application had been filed or, if the testing for the species in question was centralized, until that test had been completed. If the tests showed no distinctness between the applicant variety and other varieties and the breeder could not bring forward any new facts, then the authorities could not go on for years and years, trying again and again.

103. Mr. Urselmann thanked Mr. Heuver for his clear explanation, which did not, however, satisfy him. He had not been referring to the situation where the testing station had to go on retesting and retesting. Taking into consideration the earlier discussion on minimum distances and the different thoughts on that matter, it would be of the utmost importance for the plant breeders' rights situation that, as long as plant breeders' rights remained national in character, the breeder should have the right to apply for a trial to be conducted in the country in which he had filed the second application and to have that trial conducted in that country and not in the country which had conducted the trial in respect of the first application.

106. Mr. Lyck (AIPH) said that he considered that UPOV was working in the right direction, but that it should deal rather more quickly with problems affecting the growers. These were not that great, but there was one to which UPOV should pay increasing attention. The fact that the UPOV Convention was based on national legislation meant that the breeder could select the countries in which he wanted to have protection. That also meant that a grower in one country could be in a situation where he had to pay a royalty on his produce if he wanted to export it and yet have to compete with produce from other countries where the growers did not have to pay a royalty. The problem was not very great at the moment, but it was increasing. Mr. Lyck thought that something should be done about it and that it should be done quickly.

105. Mr. Heuver thanked Mr. Lyck for raising the problem. It was not so easy to solve, but the authorities were aware of it.

106. Mr. Slocock said that the initiative taken by the five countries seemed to him to be entirely welcome and to follow the overall policy that AIPH would like to encourage, namely the development of bilateral and hopefully multi-lateral arrangements between countries. In that context, he wondered whether there was a great deal of point in the European Communities pursuing a similar policy, when UPOV itself offered a much broader canvas on which to paint the particular picture, and whether Mr. Obst might like to comment.

107. Mr. Obst (European Communities) explained that he held it premature to take a stance on the draft that had recently been submitted to its Member States by the Commission of the European Communities as regards some of its individual points and also as regards the relationship of that draft with other programs. The stage at which the Commission currently found itself was still a very early one. The Commission was interested in inviting Member States and the professional organizations for consultations and to draw conclusions from the outcome of those consultations. Only then could it be judged whether that program should indeed be put in hand or not.

108. Mr. Heuver said that there would be further discussions at the next session of the Administrative and Legal Committee about the possibilities for developing the initiative of the "Group of Five." It might, for example, be possible for other countries, within a short time, to join the group in a bilateral way. It was not just a matter of the "Group of Five" but of UPOV as a whole, although it was recognized that it would be very difficult for countries such as Japan or New Zealand to take over the results of tests conducted in Europe.

109. Dr. Troost remarked that there were five European countries thinking about closer, more effective cooperation. There were other members of UPOV that had different ways of examining varieties and they all thought that their way was good. He would ask that the discussions be extended to include those countries.

110. Mr. Heuver replied that the member States of UPOV did work closely together and kept each other well informed. It was well-known that at least one country followed another testing procedure in that tests were done by the breeders themselves. That meant that all the breeders had to have their own reference collections or had to cooperate, for example, with universities. One of the main reasons for working towards centralized tests was to reduce the costs of maintaining several reference collections. If breeders' organizations all had their own reference collections, then testing by breeders might be a possibility. It would be open for discussion at some future point in time. Mr. Heuver said that he wished to confirm, in conclusion that there was close cooperation with the United States of America.

111. Mr. van Andel (CIOPORA) expressed the hope that cooperation could help breeders by increasing still further the range of species for which protection was available, and by making it possible to obtain protection in more and more countries.

112. Mr. Heuver thanked Mr. van Andel for raising an important point. It had been noted. All that UPOV could do was to stimulate such developments. Ultimately, the decisions rested with the national authorities.

Mr. Heuver closed the discussion on international cooperation and said that the second and final day of the meeting would be devoted to a discussion on the "UPOV Recommendations on Variety Denominations".

UPOV RECOMMENDATIONS ON VARIETY DENOMINATIONS

113. Mr. Heuver welcomed the participants to the second day of the meeting and opened the discussion on the "UPOV Recommendations on Variety Denominations" with the following words:

"Cultivated plants are essential to civilization. It is important, therefore, that a precise, stable and internationally accepted system should be available for their naming." I just quoted Article 1 of the International Code of Nomenclature for Cultivated Plants, the first edition of which was published in 1953.

"But from time immemorial, groups of plants identifiable as such, or what we nowadays call varieties, have been given names the purpose of which was to identify them--or their products--in commerce or in use. We may even assert that for the public at least a variety does not exist as such until it has been given a name, and this fact is acknowledged by Article 6(1)(e) of the UPOV Convention, which makes it a condition for the grant of protection that "the variety [is] given a denomination as provided in Article 13."

"The Convention having requested in conformity with established practice that varieties be given denominations, the plant variety protection system is bound to operate on the basis of rules ensuring that varieties are properly named. In this respect, rules applied only by virtue of a free assent are not sufficient, since the plant variety protection laws attach rights and obligations to protected varieties, many of which are closely linked with the denomination. One such obligation which should be mentioned in this connection is that any person--be it the breeder himself or a third person--who offers for sale or markets reproductive or vegetative propagating material of a protected variety must use the denomination of that variety. Incidentally, there are also other laws requiring the use of the variety denomination, as for instance in the marketing of consumption potatoes, certain fruits or other products of agriculture.

"It is therefore essential that in connection with the grant of protection, the plant variety protection offices approve and register only such denominations as meet the requirements for them to play their role throughout the life of the variety.

"These requirements are outlined in Article 13 of the UPOV Convention. It has always been the opinion of UPOV that the outline needed to be supplemented to ensure that, as far as possible, all member States implement that Article in a uniform and agreed manner. It is only by doing so that they are, singly and collectively, in a position to apply the requirement of Article 13 of the Convention that the same denomination be registered in all member States.

"The first step in this direction was made on October 12, 1973, when the Council of UPOV adopted the UPOV Guidelines for Variety Denominations. A little more than 10 years have elapsed since that date. Many things have changed, and many things will also change in the near future. In this respect, I refer you to the opening speech of the President of our Council, Mr. Rigot.

"It should be emphasized, however, that thousands of applications for protection have been filed and, consequently, thousands of variety denominations have been coined by breeders and registered by the offices. Globally speaking, the provisions of Article 13 of the UPOV Convention and the UPOV Guidelines for Variety Denominations have proved to be instruments ensuring in our opinion a smooth functioning of the plant variety protection system. In this connection I should also pay tribute to the good spirit which is guiding the largest part of the plant variety industry. Experience has nevertheless shown that some adjustments were desirable, both to adapt our rules to today's realities and to meet the needs and wishes of the various interested circles. This has been done, as far as Article 13 is concerned, in 1978. This is presently being done as far as the Guidelines are concerned.

"In accordance with the well-established policy of UPOV of consulting the interested circles whenever important--and even less important--decisions affecting their activities are to be taken, we are submitting to you today the result of our discussions, the UPOV Recommendations on Variety Denominations.

"It goes without saying that the whole exercise calls for a balance to be struck between the diverging interests of the various circles concerned and that it will be difficult--if not impossible--to give satisfaction to everybody. I need not say more about this since I would only repeat what Mr. Rigot so convincingly said earlier.

"But before opening the discussion it would be useful to read out the Basic Principles for Coining Common Names of Pest Control Chemicals and Plant Growth Regulators from the first draft proposal made in the framework of the International Organization for Standardization, which may be considered equivalent to the draft submitted to you in document IOM/I/5. These principles will show you, I hope, that the approach followed by UPOV is very far from being unreasonable. They talk about common names:

'Common name. A name given to a chemical substance to facilitate its unambiguous description without recourse to the systematic chemical name. Common names must be freely available for use in describing the substances for which they have been coined and shall not, therefore, be protectable as trade marks in respect of those or similar goods.

'The purpose of a common name is to provide a short, easily pronounced name for a substance, the full chemical name of which is too complex for convenient use in science, commerce and official regulations.

'The identity of a common name shall be maintained in all languages, subject to necessary linguistic variations.

'Common names shall be as short as is practicable, but shall not be composed only of initials and/or numerals.

'Common names shall be distinctive in sound and spelling and shall be neither difficult to pronounce nor liable to confusion with existing names.'

"Well, that was in the draft of the International Organization for Standardization. It sounds as if it was prepared by the UPOV Administrative and Legal Committee, but that is not the case. In conclusion, it is very important for the breeders, for the trade and for the growers that the different varieties can be recognized from their different names."

Mr. Heuver invited the representatives of the organizations to speak to their comments on the subject of the UPOV recommendations on variety denominations. He asked the representative of CIOPORA to begin.

114. Mr. Royon referred to the comments made by CIOPORA, which were to be found in document IOM/I/6. Ten years earlier, UPOV had adopted the Guidelines for Variety Denominations following a meeting held in December 1972 to which most of the organizations present had been invited for consultation before they were drawn up. CIOPORA had made very precise and exhaustive observations during that meeting in December 1972 and it was a fact that practically all the organizations had achieved a common point of view. Their surprise had been considerable when they discovered that the guidelines adopted by UPOV had taken absolutely no account of those consultations!

Mr. Royon felt that the representatives of the UPOV member countries would understand the problem facing the organizations. Ten years of practical experience by the government experts and also by the breeders, the professionals, in the exercise of protection had shown the problem of finding new fancy trade appellations. The breeders had become ever more convinced that the system had to be as flexible as possible to take into account the needs of everyone. The needs of breeders were not always identical. For some, recognized practice was to use figures. That was provided for in Article 13 of the Convention. Other breeders preferred to use fancy appellations alone as denominations without wishing at all to add trademarks. Other breeders, on the contrary, felt a vital need, in view of the sales and marketing systems for their varieties, to use the dullest possible denominations and to add the strongest possible trademarks to them, imitating in that way the use made of trademarks in the industrial field and by firms who marketed patented products under trademarks.

Mr. Royon felt that everything that could be said about denominations had already been said. The only thing that could be added was that the practical experience of CIOPORA members during the past ten years had strengthened their point of view and that was the reason for the extreme brevity of their written

statement. CIOFORA felt that the Convention was sufficient unto itself. It was sufficiently flexible and broad and, thanks to the 1978 revisions, sufficiently well adapted to the circumstances not to need the addition of restrictions or complications. The greatest possible liberty had to be left in the use of denominations. Existing trade practices had also to be recognized and common sense applied, without wishing to regulate everything. There should be no requirement, as suggested by the UPOV recommendations, that denominations be easy to pronounce and easy to remember. One should avoid, on the contrary, encroaching upon a field that was totally foreign to plant breeders' rights. Mr. Heuver had said that a denomination was a very small thing in the world of new plant variety protection; indeed, it had to be left in its place and problems should not be created that were likely to be truly serious and conflicts generated that everyone present could do without.

115. Mr. Heuver then invited comments from the representative of COMASSO.

116. Mr. Winter added that one item deserved particular attention. The UPOV recommendations on variety denominations that had been submitted were justified as a whole by the fact that there was a public interest in regulating the matter. Reference was made in that context to the corresponding formulation in the preamble to the Convention. That formulation in the preamble to the Convention referred, however, to necessary limitations in the exercise of plant breeders' rights that could be required by the public interest. In his view, that clause was exhaustive. It was completed by Article 9 of the UPOV Convention. He considered it dubious to refer to public interest in an endeavor to restrictively interpret clear provisions of the Convention or interpret them in a way that deformed them. He referred most particularly to the provision contained in Part I, Recommendation 2(2)(v), in respect of combinations of letters and figures. The Convention laid down quite clearly in the second sentence of Article 13(2) that variety denominations could not consist solely of figures where such was not an established practice. The background to that provision was well known. Now, however, the recommendations that had been submitted proposed--at least he hoped that it was only a proposal--to restrict a quite clear provision of the Convention under reference to public interest with the result that combinations of letters and figures would only be permissible if they were set out in a given sequence and if they were used for species where such was established practice. There was no justification for that in the text of the Convention nor, in his view, was there any other justification, and his organization therefore requested that corresponding attention be paid in particular to that provision and in that way account be taken of the needs of the industry.

117. Mr. Heuver then invited comments from the representative of FIS.

118. Dr. Loden said that he wished, before presenting the position of FIS, to restate what had been stated many times during the past seven or eight years by the Delegation of the United States of America, namely that the total area of variety denominations was not relevant to plant variety protection, that the giving of a denomination should not be a condition for the granting of protection and that it was regrettable that suggestions at the 1978 Diplomatic Conference to exclude references to denominations had not been accepted. It had been felt that it would be better for denominations to be administered under other laws and that such matters should be left to botanists and taxonomists.

Dr. Loden went on to say that FIS believed, as a matter of principle, that the only requirement for a variety name was that it should not be misleading or confusing. As was pointed out in document IOM/I/8, FIS was of the opinion that the proposed recommendations on variety denominations would unduly restrict the seed industry in the naming of varieties. FIS did not agree that the use of figures alone would be confusing or misleading. There were examples, particularly in the United States of America, that adequately proved that that had not been the case. FIS would caution that the recommendations on denominations should not create a situation in which, as some seedsmen had said, it was as difficult to obtain approval of a name as it was to breed the variety. If that happened, then compliance with the requirements for denominations would serve as a barrier to trade and would further delay the introduction of new varieties. Dr. Loden said that he wished to conclude by paraphrasing his remarks with the American expression, "please don't adopt a million dollar solution for a thousand dollar problem."

119. Mr. Heuver then invited comments from the representative of ASSINSEL.

120. Dr. Mastebroek began by noting that the relevant Convention text was simple and brief, but that its application was naturally susceptible to interpretation. ASSINSEL considered that coordination between the UPOV member States had not been optimal in that respect. It was understandable therefore that some degree of harmonization was being sought. The result of that search was the new draft recommendations. Dr. Mastebroek said that he had to inform UPOV that ASSINSEL was not happy about that draft. A great many recommendations had been formulated. According to some, denominations that breeders would not dream of using would be considered acceptable; according to others, denominations that breeders would probably like to use would be considered unacceptable. ASSINSEL would welcome general acceptance of combinations of letters and words with figures, of figures alone and also of series of denominations with one or more syllables in common that indicated the identity of the breeder. Certain breeders considered the last-mentioned way of naming varieties to be attractive and of some commercial value. They were glad that they would be allowed to continue in that way and realized, of course, that they had no exclusive right to words beginning with the syllables they made use of. They noted, however, that it was stated in the draft recommendations that a denomination should not give a wrong indication as to the identity of the breeder. The recommendation that 'TC 15' for example, would be acceptable, but not '15 TC', was given in the draft recommendations without any explanation. ASSINSEL did not understand why both denominations would not be acceptable. As far as the addition of trademarks to variety denominations was concerned, ASSINSEL believed that breeders should have a degree of freedom. After all, for many species the trademark was still the only form of protection in many countries and breeders should have the possibility to exploit fully the limited protection it gave.

Dr. Mastebroek said in conclusion that although the draft had some good elements, on the whole it contained too many recommendations that would work out in an over-restrictive way and left too much open to varying interpretations at the national level. ASSINSEL, with due respect to the effort and energy put in to drafting the recommendations, did not believe that they were a valuable step forward. ASSINSEL therefore suggested that the Guidelines of 1973 and the text of the Convention should be maintained.

121. Mr. Heuver then invited comments from the representative of AIPH.

122. Dr. Troost said that AIPH, at the risk of repeating what had been said by the previous speakers, had some points that it wished to make. First of all, AIPH believed that plant breeders' rights were a good thing for agriculture and horticulture. AIPH represented associations of horticultural growers, and growers were buyers of the breeders' products. It was therefore in the interests of the breeders to listen not only to the proposals from the national and international experts but also from their good friends to whom they had to deliver their products.

Dr. Troost said that AIPH wished to support the views of ASSINSEL and FIS that the draft recommendations were too detailed. It had noted expressly that the drafters had changed the word "guidelines" into "recommendations." It was not quite clear what the difference would be, but it seemed to be less restrictive. That was a good development because the Guidelines, as was known, had not been followed by all the member countries. Even one of the "five" mentioned the previous day had not so far followed some essential points and AIPH was not really unhappy about that. The new draft was more or less a letter of recommendation to experts, questioning to some extent their reliability, and for Dr. Troost that was excessive. Some breeders' rights offices were operating before UPOV was established. They were quite used to taking decisions and it was not really necessary to give them too much advice. In addition, the Convention text in itself was quite clear and, in the view of AIPH, clear enough. AIPH therefore requested the Committee preparing the text to revise what it had done and to be somewhat more modest in its recommendations.

Dr. Troost went on to say the AIPH had stressed in its written comments (document IOM/I/10) that growers recognized the right of breeders to add a trademark to the denomination. That right was given to breeders in Article 13 of the Convention. What AIPH was against, however, was the confusion that could arise between variety denominations and trademarks. AIPH believed that it was not generally the intention of breeders to cause confusion. It considered it to be feasible, however, for breeders to make a point of informing

buyers, their clients, which name was the denomination and which name was the trademark. In the view of AIPH it was not a good thing to give emphasis to the trademark. There were differences between denominations and trademarks, but Dr. Troost did not wish to be too specific on that point. Breeders' rights were a protection of the property itself; trademarks were just a protection for names. There was another difference; breeders' rights were valid for a fixed period, depending on the species, whereas trademarks could have an unlimited life. Instead of giving too many recommendations on variety denominations, UPOV should give clear advice to the national legislators to assist in preventing the confusion that sometimes arose between denominations and trademarks. There also, AIPH would ask for general rather than over-detailed rules. At the end of its written comments, AIPH had suggested a paragraph that could be added to Article 13(8) of the Convention. It left it to the professional draftsmen in UPOV to improve the wording.

123. Mr. Heuver then invited comments from the representative of AIPPI.

124. Dr. von Pechmann felt it improbable that a single new point of view would emerge from the whole discussion. The associations had continued to insist for the last ten years that the very liberal wording of the Convention should be applied. The problem consisted in the fact that the attempt was again being made with the help of recommendations to restrict that liberal wording as contained in Article 13 of the UPOV Convention. He wondered where justification was indeed found for so doing since it could not in fact be shown that serious problems would arise from that liberal practice. He could see no serious problems, he could see only the difficulties of the breeders in coining usable variety denominations despite the guidelines or recommendations. It should not be forgotten that those variety denominations were aimed at specialists and were not in fact used in relation to small children not yet in a position to make a distinction between terms. They were aimed at a profession that was primarily composed of agricultural specialists who increasingly underwent intensive professional training. When it was considered how intensive a professional training farmers enjoyed today, for instance in the Federal Republic of Germany, one had indeed to assume that they were in a position to distinguish between variety denominations composed of figures and letters and visible in their printed form. He believed that the whole matter was being exaggerated and he therefore requested that the ideas that had been repeatedly put forward by the breeders over the last ten years should at last be taken into account to avoid the same old subject being chewed over yet again.

125. Mr. Heuver then invited comments from the representative of the International Commission for the Nomenclature of Cultivated Plants.

126. Mr. Schneider (International Commission for the Nomenclature of Cultivated Plants) said that the Commission he was representing was responsible for the International Code of Nomenclature for Cultivated Plants. In that Code rules were laid down for the formation of cultivar names. On the one hand, the Code helped breeders and seedsmen to find their way in matters of nomenclature; on the other hand, the Code was there to protect users and consumers of varieties against names that were confusing in one way or another. Mr. Schneider did not believe it necessary to go into further detail since that had been done very clearly during the UPOV Symposium on "Nomenclature" the previous month. Then, Mr. Brickell, Chairman of the International Commission, had given an extensive survey of the aims and workings of the Code. He had made it very clear that those aims were moving very much in parallel with the aims of UPOV as far as the naming of cultivars was concerned.

127. Mr. Heuver said that it was rather difficult for him to comment on all the reactions. He wished to stress, however, that the national authorities had been given the responsibility of accepting or not accepting variety denominations. The national authorities together had to do their best to ensure that, as far as possible, a variety was given the same denomination in all UPOV member countries. Perhaps, as had been said, the recommendations were too detailed in certain points, but it seemed to him that the principal thing that breeders were saying was that they wished to have the freedom to get on and do the job. Breeders might think that they could do it easily, perhaps with computers, but there was a lot of other work that had to be done if the principle of one denomination per variety was to be maintained. The question had been discussed at the last meeting of the Administrative and Legal Committee, but more thought was needed. It had been tentatively discussed whether,

for example, the country doing the centralized testing for a species could also be given the task of making a first screening of variety denominations. Efforts were already being made to set up a pilot project in that direction and there would be further discussions in April 1984. Mr. Heuver believed, however, that whatever improvements were made, recommendations would still be needed to help the national authorities to follow more or less the same principles. Otherwise, the whole matter had to be left completely to the breeders. Personally, he did not think that the national authorities would be prepared to go that far.

In conclusion, Mr. Heuver said that the fundamental remarks and criticisms of the present system made by the organizations had been noted. They would be fully considered and would be brought to the attention of the Council of UPOV.

128. Mr. Fikkert said that, having read and heard the arguments of the professional circles, he had the impression that some of the organizations were mistaken about the aim of the recommendations. He would like to stress that the recommendations were not intended as a limitation of the Convention text. Their sole purpose was to help to harmonize the interpretation made by several countries of that text. Perhaps the organizations should reconsider some of their arguments in the light of the particular aim of the recommendations.

129. Mr. Royon said that he did not agree at all with the comments made by Mr. Fikkert. The recommendations, or at least the guidelines currently in force, did not only serve the purpose of harmonization. In any event, their effect was limitative. The Convention excluded only figures and, moreover, only where they were not established practice. Since the recommendations excluded combinations of letters and figures, they were more limitative than the Convention. Since they required that a denomination must necessarily be easy to pronounce and easy to remember, they were likewise much more limitative.

Mr. Royon said that after that first comment, he would like to return to the general problem under discussion. CIOPORA had requested on a number of occasions that the system of nomenclature it had set up thirty years ago be officially recognized by UPOV. It had never received a reply. It would like to know whether that international practice was finally to be recognized or, if not, for what reason it was not to be recognized. Indeed, CIOPORA held that its system, which was in fact facultative and not a constraint, would give satisfaction, at least for its members, without having a limitative effect for the national Offices and for the UPOV system.

Mr. Royon noted that it had been said that the aim was harmonization and that UPOV wished at least that a denomination be identical in all the member countries. It was obvious that a fancy appellation was the least appropriate means of achieving such standardization since only in exceptional cases was a fancy name easy to pronounce and easy to remember in all their languages.

Mr. Royon felt that the professional associations that were present were all extremely happy to have been invited for the consultation. However, if over the years they were forced to admit that their recommendations and their demands, that were justified and reasonable, were not heard, consultation was likely to lead to an effect diametrically opposed to that sought after. He wished to personally express the wish that the disputes that could arise in respect of applications for denominations in various countries would not become more numerous. That was likely to happen if the professionals were not listened to.

130. Dr. Lange commented that quite a lot of what had been said had to be put into focus. He wished to agree with what had been said by Mr. Royon and also, in one respect, agree with Mr. Fikkert, namely that grounds would have to be given for the recommendations, and their intention would have to be stated. He himself, however, had not as yet understood at all the justification for them. It was an error to believe that the associations would demand that breeders be entirely free to choose variety denominations in any way they wished. Breeders obviously also had to respect the clear wording of the Convention. However, the recommendations should not in any way go beyond that wording, although in many cases the impression was that such was happening. Moreover, he harbored the fear that the difficulties would not get smaller but indeed get bigger and that one day it would become more difficult to examine

the variety denomination than the variety itself. That could surely not be what was wanted in practice. All associations had spoken out unanimously against those recommendations. That fact should also indeed be respected.

131. Mr. Fikkert considered that it was unfair, when referring to the question of figures, or letters and figures, to quote in isolation that part of Article 13(2) of the Convention that provided that the denomination might "not consist solely of figures." That provision had to be read in the context of the whole of Article 13. Article 13(2) began by providing that "the denomination must enable the variety to be identified." That was the basis for the particular recommendation concerning combinations of letters and figures.

132. Mr. Kunhardt observed that it was probably very difficult indeed to present absolutely new points of view on that topic. Nevertheless, he wished to emphasize a number of points in order to explain the starting point of the UPOV States, which could be, at the same time, also a justification for those points in respect of which the States could probably not accept the proposals of the professional organizations. A large part of the arguments that had been put forward that day reflected the debates on Article 13 of the Convention, both those held in respect of Article 13 of the 1961 Convention and those in respect of the same Article in the revised 1978 wording. In both discussions there had been differing views on the role to be played by variety denominations in the system of plant breeders' rights. In that respect, the concepts of the organizations had mostly not been adopted. He could indeed easily understand that the organizations now wished to attempt at least to achieve the greatest possible degree of flexibility in the application of Article 13 and in that way to obtain possibilities that they would have preferred to have incorporated in the Convention itself. The representatives of the UPOV States, however, had to take into account the fact that the Convention had not adopted--or at least not fully adopted--the concepts of the associations. There was a further important point that had to be mentioned in that respect. Article 13 did not in fact contain an exhaustive catalogue of what was acceptable for a variety denomination and what was not acceptable. In particular, it contained no provision saying that everything was acceptable as long as it did not consist solely of figures. That had not been the intention nor the principle of the Convention. He wished therefore once more to briefly set out the principle of variety denominations within the meaning of Article 13 according to the views of the UPOV States.

To begin with, Article 13 said that a variety denomination was a generic designation. That term was indeed in need of interpretation. What was suitable as a generic designation and what was not suitable as a generic designation would have to be deduced. He gave an indication in that context of what the UPOV States understood under generic designation. A generic designation was the name of goods, the designation of an object. In the case of varieties, such a designation of an object had to be created artificially since for that object, contrary to the majority of inventions in the industrial field, words taken from everyday language were not available. That also meant, however, that a generic designation that had to be artificially created also needed to meet certain requirements that generic designations from everyday language would also normally fulfill.

From the general context of all the provisions on variety denominations it emerged that the primary purpose of variety denominations was not to reinforce plant breeders' rights. The statements made by the associations were therefore quite right in that respect. Variety denominations were associated with the variety, even after expiry of the plant breeders' rights, and had to serve the interests, however they might be defined, of the customer and of the consumer of reproductive material. That meant, however, that variety denominations were not simply a means of registration as was the number of a patent, but that they had a different significance. The UPOV States were aware of the argument put forward by the associations that such a regulation, that had more of a public law nature, had no place in a system of plant breeders' rights. However, that was the very point in which the Convention had decided otherwise and where a provision to protect consumers had intentionally been included in the Convention. The UPOV States wished to start from this fact when interpreting the Convention and could see no possibility, at least here and now, of calling into question that principle of the Convention. The Administrative and Legal Committee had no corresponding terms of reference.

He understood very well that, under those circumstances, the associations preferred to leave as open as possible any type of interpretation of the Convention. That could open up for them the possibility of practice in a number of States corresponding to the concepts of the breeders, with which they could associate the hope that in such a way corresponding practice would be possible in some States at least or that the practice accepted in some States would exert an influence on other States. However, there existed at least one group of States, and the Federal Republic of Germany belonged to that group, that had an interest in preventing a trend whose aim was to level off variety denomination practice at its lowest point and to prevent denominations becoming accepted that no longer corresponded to that group's concept of a generic designation. Those of the UPOV States that had an interest in maintaining the principle, that he had just referred to, indeed saw every reason to take care that they applied the principle in the same way wherever possible. He could also conceive that, under those circumstances, a recommendation of that type could also offer advantages to the breeders since it would be easier for them to tell what type of variety denomination stood the greatest possible chances of being accepted by all or at least a majority of UPOV States.

As regards the recommendations, he felt in particular that almost all of them could in fact pass undisputed since very frequently they clarified certain important positions or requirements while representing no particular burden on the breeders. He could see, at most, only one recommendation that could lead to any degree of discussion. That was indeed the recommendation 2 mentioned by COMASSO. However, even in the case of that recommendation, he considered that the reservations of the associations appeared to aim more at keeping open an option to remove future difficulties in the future application of its principles than the solution of existing difficulties. Indeed, the UPOV States had also gained ten years of experience so far, and although that experience had told them that individual problems could arise and had arisen for enterprises in finding variety denominations, they also saw that in the majority of cases, variety designations that had been found by the breeders had generally been acceptable. They were therefore of the opinion that the existing problems could indeed be solved within the framework of such recommendations and that those problems that had been brought forward during earlier discussions were individual problems that could be resolved. He was thinking particularly of the following items: in by far the greater number of cases it had not been necessary to formulate the variety designation in such a way that it had the same effect in all languages of the world. It was not the rule for all species that all their varieties were marketed throughout the world. Indeed, it very frequently occurred that given varieties were only marketed in a given area for which it must indeed be possible to find a generally acceptable variety denomination. Moreover, the corresponding recommendation clearly stated that the variety denomination did not need to have a meaning. That reduced considerably the probability of linguistic problems cropping up. Indeed, in the case of such variety denominations the question did not normally even arise as to whether they could be translated into another language. It was also stated that a trademark could be used. Where the UPOV States had followed developments, it would seem that so far, as a rule, undertakings had had the possibility of formulating their trademarks in such a way that they could fulfill their purpose as the real medium for advertising and that they had likewise also been in a position to find variety denominations, that were not necessarily effective for advertising but that satisfied their function of designating the variety as a generic designation.

The UPOV States were therefore not convinced that the principle of the recommendations constituted an instrument that was harmful in general to breeders but in fact believed that it constituted a system whose principle was reasonable, although possibly some problems were as yet unresolved, and that within the framework of such recommendations individual problems could indeed be discussed and most probably also solved.

133. Mr. Royon thanked Mr. Kunhardt for his explanations since they had made him feel ten years' younger. Mr. Royon had the impression that nothing had happened in the last ten years and that the message of the professional organizations had not been heard. He did not wish to return to the statement made by Mr. Kunhardt, except to say that CIOPORA was not at all in agreement with that concept. He wished to emphasize one single item. Contrary to what had been said by Mr. Kunhardt, trade in new plant varieties was becoming more and more international. Mr. Royon wished, on the other hand, to return to the

comment made by Mr. Fikkert and to make a simple observation. In the text of the 1961 Convention, Article 13(2) had already been less restrictive than the 1973 guidelines, but nevertheless stated: "such denomination must enable the new variety to be identified; in particular, it may not consist solely of figures." In the 1978 wording of the Convention, the words "in particular" had been deleted and, moreover, the following had been added: "... except where this is an established practice for designating varieties." The provision under Article 13(2) had therefore been made more flexible in two ways.

134. Dr. Leenders noting that it had already been said that the meeting was a repetition of the consultations that had taken place in 1972, thought that the Records of the meetings that preceded the adoption of the 1961 Convention showed that the question of variety denominations had frequently been discussed even at that time. Those Records were unfortunately not that complete, but it could be seen that the text appearing in the 1961 Convention had been introduced at the very last moment.

Dr. Leenders recalled that he had pointed out during the recent Symposium on "Nomenclature" that part of the problem was probably caused by the fact that variety denominations very often had a dual function. Mr. Kunhardt had said that one of the functions was the identification of the variety. He had said that the variety denomination was not meant to be used primarily as a commercial name. He should know, however, that at least in the agricultural sector a breeder chose his variety denominations for commercial rather than identification purposes. Mr. Kunhardt seemed to be in favor of variety denominations that would not be used commercially. At any event, he had emphasized that the variety denomination was meant to identify and that it was generic. Dr. Leenders thought that the latter requirement had been in the Convention from the very beginning. Mr. Kunhardt had said that it was not possible to talk about the principles here. In Dr. Leenders' view it might not even be wise to do so, because if one wanted to talk about the principles it would be better to start with five people rather than with a hundred. He recognized that it was very difficult, but it was his personal conviction that it was necessary to examine whether the basic principles of the Convention were right. The present discussions were being held in the building of an organization that was 100 years old. The business of that organization was patents and trademarks. One might ask why use was not being made of its experience. It might well be worthwhile investigating whether there were better possibilities than those chosen by the authors of the Convention. Breeders had problems with variety denominations, even in the agricultural sector from time to time. All of the breeders found the proposal too complicated. Mr. Fikkert had emphasized that it was only a set of recommendations, but breeders had had some experience with the 1973 Guidelines. In some countries they had immediately been transformed into national prescriptions.

Dr. Leenders said in conclusion that he would personally welcome basic discussions, even on the text of the Convention itself. He recognized, of course, that it would have to be a long-term project.

135. Dr. Loden said that his remarks were somewhat along the line of the broad philosophical point alluded to by Dr. Leenders. It had to be recognized as a fundamental fact that the name of a product introduced into commerce, whether it was a plant variety, a chemical or any other new product, could determine the success or failure of that product in the market place. That was a responsibility that managers of businesses and enterprises were not willing to delegate to public servants. Plant breeders and seedsmen were aware of their responsibility and recognized that the variety name must not be misleading or confusing. They also recognized that quite often the name proposed by the originator was not acceptable to the authorities. Likewise, names that might be acceptable to the authorities might not be acceptable in the market place. In conclusion, if there was to be a mistake in the naming of a new product, then the sole right to make that mistake must belong to the introducer, whose future and financial well-being would be adversely affected.

136. Mr. Heuver said that he just wished to confirm that the national authorities certainly agreed that it was the responsibility of the breeder to choose the variety denomination. The authorities did not choose denominations; they merely determined whether the choice made by the breeder met the requirements of the Convention.

137. Dr. Troost said that he had listened to the points of view expressed by the different organizations. He was very happy with the statements made by Mr. Kunhardt. Dr. Troost explained that he had not been in a position to attend the recent Symposium on "Nomenclature", but he was fully aware that UPOV had not started the question of variety denominations. That question had existed before the idea of plant breeders' rights developed. It had always been useful in agriculture and horticulture for a variety to be identified by a name, as was recommended in the International Code of Nomenclature for Cultivated Plants. He was very happy that UPOV had been able to base its work on that done by the botanists. He believed that AIPH had a special interest in variety denominations because the growers and users were entitled to a clear generic designation of the varieties bred and produced by the breeders. Dr. Troost therefore wished to repeat what AIPH had submitted in writing, namely that it agreed in principle to the recommendations for the verification of variety denominations. The recommendations were perhaps too long, but AIPH supported the work of the Administrative and Legal Committee and was not against everything that it had done.

138. Mr. Kiss began by begging to disagree, as Chairman of the "Maize" Section of ASSINSEL, with the recommendations, particularly as regards the combination of figures and letters. He also begged to disagree with the claim made by Mr. Kunhardt that varieties did not circulate very much. Mr. Kiss was sorry to say, as far as hybrids of maize, sorghum and sunflower were concerned, that the same hybrids that existed in France were exported to Japan and unfortunately, for that country, for example, the fancy name could not be used. The same hybrids likewise existed in Canada, Argentina and Australia.

139. Mr. Royon said that CIOPORA was not opposed to the recommendations. Recommendations intended to harmonize procedures were always welcome and could always make a contribution. What in fact was shocking CIOPORA in the proposed recommendations, as indeed in the existing guidelines, was the philosophy on which they were based. It considered that a dialogue was extremely difficult, if not impossible.

140. Mr. Winter wished to emphasize that COMASSO in no way held work on the harmonization of variety designation rules to be pointless. However, the statement made by Mr. Kunhardt contained elements that could not be supported by COMASSO. That applied in particular to the grounds advanced by Mr. Kunhardt as justification and also for the examples that had been given. He wished to speak once more of recommendation 2 in which unequivocal provisions of the Convention had been restrictively interpreted. Mr. Kunhardt repeatedly quoted public interest in consumer protection as a justification, as also the provision that the variety denomination had also to be the generic designation of the variety. Mr. Kunhardt had started from the assumption that the requirement that the variety denomination should be a generic designation had been established in order to protect consumers. That was not the case however. The fathers of the Convention had simply intended that the provision should clearly separate trademark law and variety protection law.

He wished to add a further observation. In his view, the points made by Mr. Kunhardt would have been quite justified within a body that had to deal with the regulation of variety denominations in the area of rules on trade in seed. He wished to speak of the particular European concerns and was using that point as an example. Trade in seed within the European Communities was regulated in relative detail by Community directives. He had been surprised to see that each directive only stated in respect of variety denominations that a variety had to be designated by means of a registrable variety denomination. There were no recommendations or guidelines dealing with whether a short-stemmed rose could be designated with the name "daddy longlegs" or not, although he in fact found that quite amusing. He wished simply to give matter for thought.

141. Dr. von Pechmann wished in fact to put just one more question. According to his information and his knowledge, practice in the largest member State of UPOV, that was to say the United States of America, was relatively liberal. He wished therefore to put a question to the representative of the United States of America and to ask him whether his country had experienced serious problems with that very liberal denomination practice. In that connection, it had also to be taken into account that two different types of protection were

afforded in the United States of America, namely patent protection--the plant patent--and additionally, plant variety protection. In view of those circumstances, it would interest him to know what experience had been gained with that liberal denomination practice. The answer to that question could possibly give valuable indications on the way in which the problem could also be regulated in a practicable way in the other UPOV member States.

142. Mr. Schlosser (United States of America) said that he would be glad to attempt an answer to Dr. von Pechmann's question. Mr. Schlosser would not characterize the practice in his country as liberal or conservative. He would simply say what it was and leave participants to draw their own conclusions. Every government, of course, had the right to choose the system that it would use for the registration of variety names. His Government had chosen to apply the International Code of Nomenclature for Cultivated Plants, rather than the Guidelines developed by UPOV. The system in his country was in the process of being established, but so far no problems had been encountered and none were expected.

143. Dr. Böringer felt that he should make a comment on the statement by Mr. Schlosser. It had previously been said by one of the professional organizations that it would perhaps be preferable to leave the whole question to the botanists. Particular reference had been made to the botanical nomenclature. Mr. Schneider had also touched on that point. Mr. Schlosser had now subsequently referred to the International Code. However, that International Code was much, much more restrictive than Article 13 of the UPOV Convention or than the recommendations, which only represented an aid to the interpretation of Article 13. If it were wished, therefore, that those suggestions be taken up, the discussions would have to be begun over again. A new discussion would then have to be held, starting from scratch, as to whether the good old practices, that had existed for 200 or 300 years, should be incorporated in plant breeders' rights or whether it would not in fact be better to put up with Article 13 as it now stood. Despite all objections and despite all the criticisms that had been brought forward or that had been expressed by the great majority of the organizations represented at the meeting, UPOV would not be able to dispense with such recommendations if it was going to achieve uniform variety denomination in the UPOV member States.

144. Mr. Royon said that he would like to repeat his question whether UPOV would consider accepting as an international practice the system of nomenclature implemented by CIOPORA.

Referring briefly to what Dr. Böringer had said, Mr. Royon wished to underline that CIOPORA was quite content with Article 13. It was how that Article might be restrictively construed that made CIOPORA unhappy. It believed absolutely that a flexible system had to be devised, the basic principle of which should be that the denomination of a variety should be the same the world over. What had to be determined was which system was best adapted to reach that goal. CIOPORA had found a system which it thought to be well adapted. It might be that for some species its system was not the best. What was essential was for UPOV to be flexible and to consider the specific requirements of the various groups of people concerned.

145. Dr. Leenders said that he wished to support Mr. Royon's call for a flexible system.

146. Mr. Kiss wished to add one point, that was to say that he was always afraid of UPOV recommendations. Indeed, the national Offices interpreted them in a different way. He quoted as an example the fact that following a UPOV recommendation an article appeared in the "Moniteur belge" dealing with variety denominations, in which it was said in essence that it was the competent service that decided whether a practice was an international practice or not. That meant that it was a State service that decided and that was what he was afraid of.

147. Mr. Kamps (ASSINSEL) noted that the discussions so far had concerned only Part I of the proposed recommendations. There was also Part II, dealing with the procedure for exchanging information on proposed variety denominations between the member States. Those rules were more or less the same as the Provisional Rules of Procedure for the Exchange of Variety Denominations, adopted by the UPOV Council in 1971. In all the gazettes known to him there were specially marked sections for variety denominations, drawing attention to their importance for UPOV member States. It was his experience, however, that

even if a variety denomination had been accepted in one country, it often happened that other countries had objections to applications for registration of the same denomination. Mr. Kamps strongly recommended good cooperation in line with Part II of the proposed recommendations. Such cooperation should end in a certain priority for the first application if that had been approved. It should be an exception for a denomination approved by one member State to be refused by another.

148. Mr. Heuver said that the national authorities were certainly aware that they could harmonize their procedures. Efforts were being made to make the system run more smoothly and to reduce the time taken to process applications.

Mr. Heuver then thanked the organizations for the many remarks they had made. Some of them were certainly things that had been said before, but sometimes there was a need for repetition. The remarks made would be considered at the next meeting of the Administrative and Legal Committee, in April 1984. The aim of the recommendations was to improve harmonization between the member States. It was clear that the organizations were of the opinion that they went somewhat further. UPOV would look at them again. After reconsideration in April 1984, they would be submitted to the Council for approval in October of that year. Some of the remarks that had been made were of a fundamental nature and those would have to be referred to the Council.

149. Mr. Rigot closed the meeting with the following words:

"I think that we have arrived at the close of our discussions. Allow me to express to you the great satisfaction felt by UPOV and by myself in particular at the manner in which the meeting has developed and also at what it has taught us. We invited you in order to hear you, to listen to your ideas and your arguments. I must admit that, even if all our wishes have not been fulfilled, in any event we are most definitely satisfied, although of course the opinions of all participants did not always entirely agree and indeed each of us had to expect that. The statements and the discussions have been manifold, frank, open and in all cases polite. Everyone has been able to express his point of view as he wished. My conclusion would be that the meeting has been useful since it has cast considerable light on the matter and because it has taught us things for the future.

"I would repeat what has been said by the two Chairmen of the meeting and of Committees that all the opinions expressed will be examined, assessed and weighed up. We shall attempt to extract everything that is useful for the general interest and for the breeders in particular. You have brought us a host of materials. At UPOV we have the architects who will be capable, I believe, of making a judicious choice among those materials and thus build an edifice which, I hope, will be functional and in which, if possible, every breeder will find himself at ease.

"It remains only for me to thank our guests, whose contributions have certainly been positive. I would also like to thank particularly the two Committee Chairmen, Mr. Heuver of the Netherlands and Mr. Elena of Spain. Their task has not been an easy one since we did not really know how this meeting was going to go off and I must say that they prepared themselves with great thoroughness. They have conducted the discussions with mastery and competence and I can but, in your name I believe, congratulate them. I would also like to express my thanks to the German, French and Dutch experts who came here to illustrate our debates by setting out actual cases. They have shown us, I believe, the great difficulty of their profession and also the problems that exist and they have considerably enlightened the discussions. Finally, there has been the activity, more discreet of course, of the Secretary-General, of the Vice-Secretary General and of their staff. These are the people on which UPOV's activity is based and who contribute many elements to the discussion. The efficiency of their action, I believe, is equalled only by the discretion of their work. Finally, I would not want to forget those without whom things could not have been as they were, that is to say the interpreters who ever move with dexterity and great elegance through our technical fields and the maze of technical terms. I thank them also.

"I thus close the debates and bring the meeting to an end by wishing each of you a very pleasant trip back to your homes. Thank you."

Figure 1 (paragraph 49)DISTINCTION BETWEEN THREE WHITE CARNATIONS

	Variety A	Variety B	Variety C
Number of petals	70.80 ± 7.40	65.30 ± 5.70	<u>92.90 ± 9.60</u>
Length of 5th internode	69.00 ± 15.40	66.50 ± 7.10	73.50 ± 7.10
Length of leaf	134.00 ± 7.70	142.50 ± 8.20	121.50 ± 22.00
Length of calyx	30.20 ± 1.70	30.90 ± 2.10	<u>32.80 ± 2.50</u>
Length of petal	51.80 ± 2.10	51.60 ± 2.60	<u>56.90 ± 2.30</u>
Width of petal	32.30 ± 2.60	31.90 ± 4.20	35.60 ± 1.80
Shape of petal	type 3	type 3	type 3
Surface of blade	folded	folded	folded
Shape of ovary	rhomboid	rhomboid	rhomboid
Shoulder of style	<u>present</u>	absent	absent
Surface of ovary	ribbed	ribbed	ribbed

Figure 2 (paragraph 52)

FRENCH BEAN - PHASEOLUS VULGARIS
CHARACTERISTIC: CROSS SECTION OF POD

1. very narrow elliptic
2. narrow elliptic
3. elliptic
4. broad elliptic
5. cordate
6. circular
7. eight-shaped

In our opinion

1 † 3 † 5 † 6 † 7 - 2 † 4 † 5 † 6 † 7

1 = 2; 2 = 3; 3 = 4; 4 = 6

5 differs from all other categories

7 differs from all other categories

Attention! within 2 days: 2 may become 3
3 may become 4
4 may become 6

Figure 3 (paragraph 52)

PEA: COLOR OF FOLIAGE - PISUM SATIVUM

1. yellow green

2. light green

3. medium green

4. dark green

5. blue green

6. emerald green

Former Test Guidelines (1974)

6 color ratings

Possible distinctions:

1 † 3 † 5 † 6 et 2 † 4 † 6
1 = 2; 2 = 3; 3 = 4; 4 = 5

New Test Guidelines (1981)

3 color ratings

Possible distinctions:

1 † 3 † 5

Figure 4 (paragraph 52)

TIME OF FLOWERING

Difference between two species: Pea (*Pisum sativum*) and French Bean
(*Phaseolus vulgaris*)

Characteristic: Number of days from sowing to
appearance of first flower (10% of
plants for example)

Where work is done on lines deriving from individual plants.

PISUM SATIVUM:

A minimum difference of 1 day

observed in two consecutive growing seasons (or two out of three), always with
the same sign, can be deemed a sufficient minimum distance for determining
distinctness.

PHASEOLUS VULGARIS:

A minimum difference of 3 days

observed in two consecutive growing seasons (or two out of three), always with
the same sign, can be deemed a sufficient minimum distance for determining
distinctness.

Figure 5 (paragraph 53)

VARIATION AND CHARACTERISTICS

QUANTITATIVE CHARACTERISTICS - EXAMPLE FRENCH BEANS

Study as a function of the weight of the variety "Princesse"

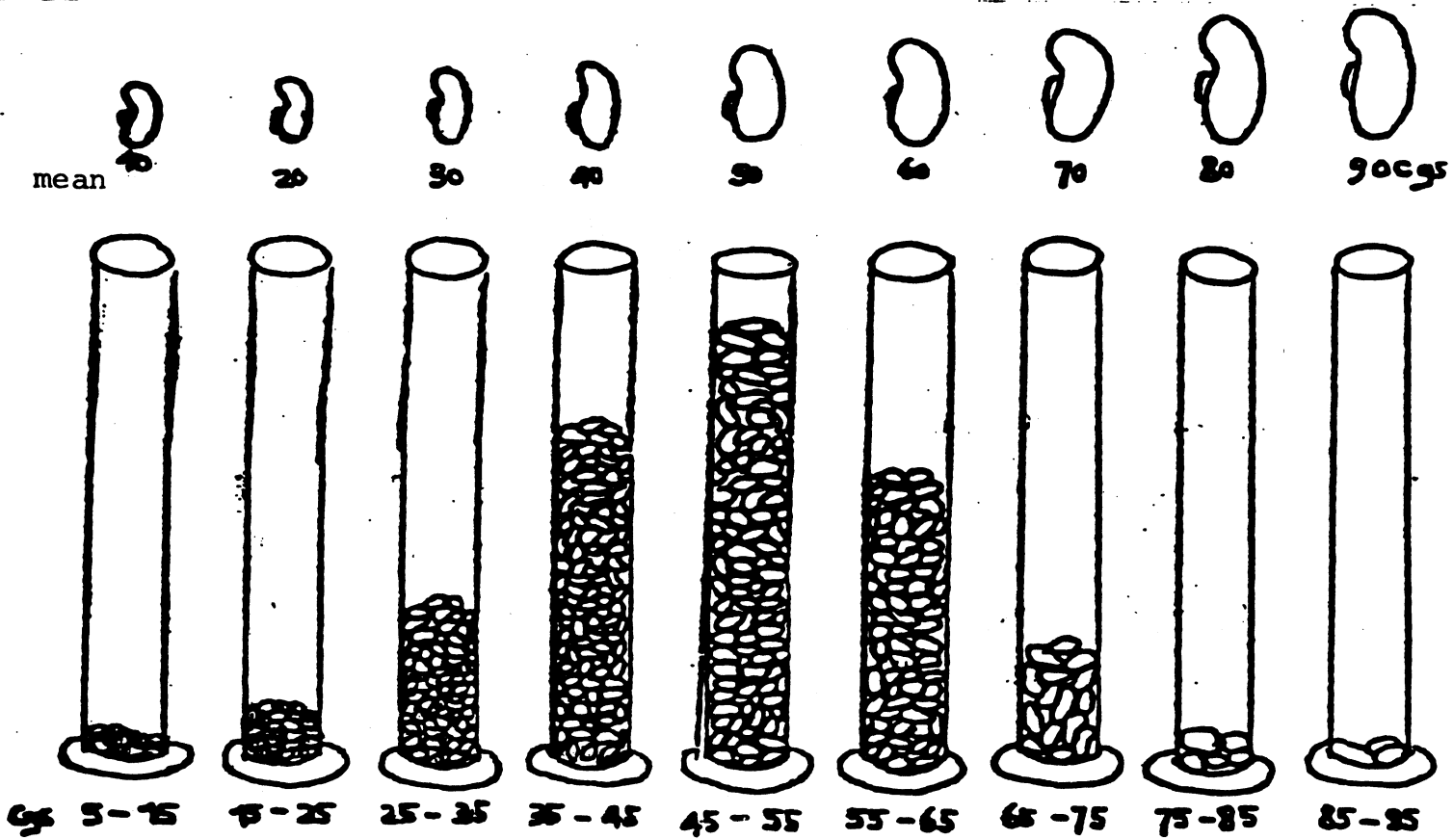


Figure 6 (paragraph 53)

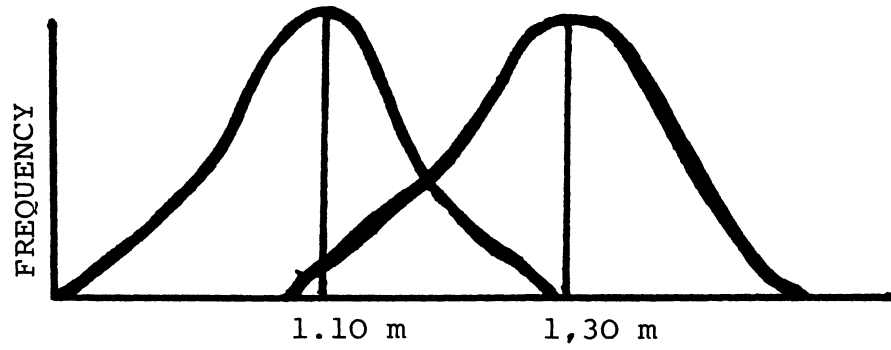


Figure 7 (paragraph 53)

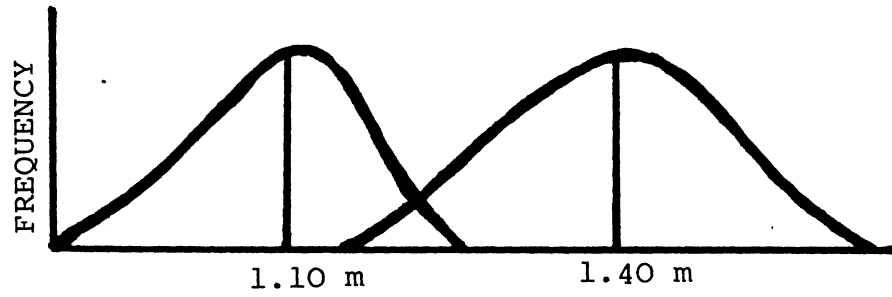


Figure 8 (paragraph 53)

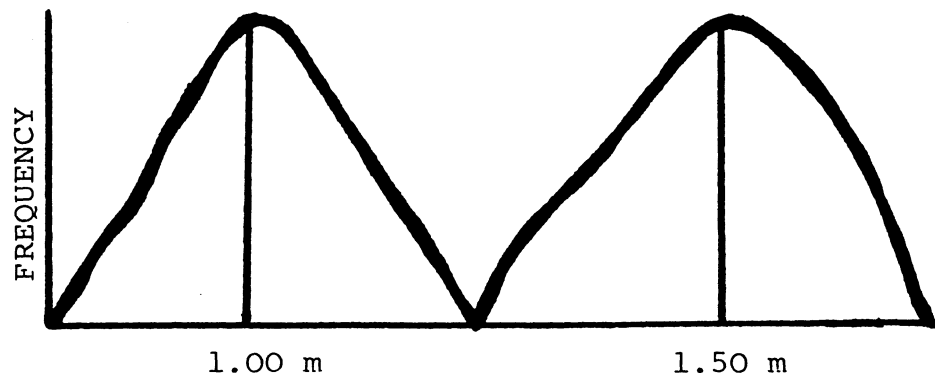


Figure 9 (paragraph 53)

DENSITY OF THE EAR

1	.	.	4	5	6	7	8	9
.	2	.	.	5	6	7	8	9
.	.	3	.	.	6	7	8	9
1	.	.	4	.	.	7	8	9
1	2	.	.	5	.	.	8	9
1	2	3	.	.	6	.	.	9
1	2	3	4	.	.	7	.	.
1	2	3	4	5	.	.	8	.
1	2	3	4	5	6	.	.	9

Figure 10 (paragraph 53)

ANTHOCYANIN COLORATION OF THE COLEOPTILE IN A CONTROLLED ENVIRONMENT

1	.	.	4	5	6	7	8	9
.	2	.	.	.	.	7	8	9
.	.	3	.	.	.	.	.	9
1	.	.	4	.	.	.	.	.
1	.	.	.	5	.	.	.	.
1	.	.	.	.	6	.	.	.
1	2	.	.	.	.	7	.	.
1	2	.	.	.	.	.	8	.
1	2	3	.	.	.	.	.	9

Figure 11 (paragraph 56)DISTINCTNESS IN HYBRIDS OF TOMATO

- VARIETIES:
- MANILLE (breeder - Tézier)
 - 82.04 (application in France)
- GENETIC STRUCTURE:
- F₁ hybrid
- VARIETAL TYPE:
- determinate varieties for glasshouse - with collar rot; blotchy sensitive.
 - resistant to TMV : allele Tm², heterozygote
- DUS EXAMINATION:
- in 1982 and 1983
 - 20 plants in glasshouse
 - 40 plants outside
- RESULTS:
- no characteristic for distinctness

Figure 12 (paragraph 56)

	<u>82.04</u>	<u>MANILLE</u>
Date of flowering	0.21 ± 0.40	0.61 ± 0.60
Number of inflorescences at determination	6.80 ± 0.60	6.90 ± 0.80
Height/diameter of fruit		
2nd inflorescence	0.81 ± 0.03	0.82 ± 0.03
3rd inflorescence	0.79 ± 0.05	0.83 ± 0.04
Number of locules in fruit		
2nd inflorescence	3.25 ± 0.36	3.17 ± 0.36
3rd inflorescence	3.20 ± 0.32	3.13 ± 0.42
Length of peduncle of fruit		
2nd inflorescence	12.20 ± 0.60	13.10 ± 0.80
3rd inflorescence	11.80 ± 3.20	13.40 ± 1.90
Fruit weight		
in glasshouse	123.70 ± 6.70 g.	131.00 ± 5.30 g.
outside	116.60 ± 8.70 g.	118.20 ± 11.80 g.

Four trials with two plots: in total 180 plants and 210 fruits of each variety.

Figure 13 (paragraph 74)DIFFICULTIES OF DISTINCTNESS BETWEEN TWO
ONION VARIETIES FOR DRY MATTER CONTENT

VARIETIES: - HYSOL Common Catalogue (NL, UK) - from USA

 - 81.03 Application for the French National List

GENETIC STRUCTURE: POPULATION

VARIETAL TYPE: varieties with WHITE SCALE AND SKIN with HIGH DRY MATTER CONTENT

ORIGIN OF 81.03: bred from in HYSOL for HIGHER DRY MATTER CONTENT

DUS EXAMINATION

- 1981, 1982, 1983
- no distinctness for any of the characteristics in the Test Guidelines, except for dry matter content
- trials for dry matter content that were more refined. were conducted in 1982 and 1983:
 - 1982 (Cavaillon) - 3 plots each of 81.03 and HYSOL (120 bulbs per plot)
 - 1983 (Aix en Provence) - 3 plots each of 81.03 (1981 seed)
 - 3 plots each of 81.03 (1983 seed)
 - 3 plots each of HYSOL (1982 seed)
 - 3 plots each of HYSOL (1983 seed)
 - (280 bulbs per plot)
 - 1983 (Cavaillon) - 2 plots of the same samples (80 bulbs per plot)

Figure 14 (paragraph 74)

DRY MATTER CONTENT (I.R.): 81.03 and HYSOL in 1982

	AVERAGE OF 3 VALUES RECORDED AND STANDARD VARIATION		
	16 December	22 December	19 January
81.03 1982 seed	$15.20 \begin{cases} 15.67 \\ = \Delta 0.94 \\ 14.73 \end{cases}$	$15.83 \begin{cases} 16.45 \\ = \Delta 1.24 \\ 15.21 \end{cases}$	$15.54 \begin{cases} 16.06 \\ = \Delta 1.04 \\ 15.02 \end{cases}$
HYSOL 1982 seed	$14.84 \begin{cases} 15.58 \\ = \Delta 1.48 \\ 14.10 \end{cases}$	$14.67 \begin{cases} 15.35 \\ = \Delta 1.36 \\ 13.99 \end{cases}$	$13.95 \begin{cases} 14.65 \\ = \Delta 1.40 \\ 13.25 \end{cases}$

- sown on March 9 in the South of France at Cavaillon
- every value corresponds to 30 bulbs, studied by sample of 10 bulbs at each date
- value in refractometric value (I.R.)

Figure No. 15 (paragraph 74)

DRY MATTER CONTENT (I.R.) : 81.03 and HYSOL in 1983

AVERAGE OF 3 OR 2 VALUES AND STANDARD VARIATION			
		End of October	Beginning of November
AIX EN PROVENCE	81.03 1981 seed	18.08 $\left\{ \begin{array}{l} 18.70 \\ = \Delta 1.24 \\ 17.46 \end{array} \right.$	17.80 $\left\{ \begin{array}{l} 17.90 \\ = \Delta 0.20 \\ 17.70 \end{array} \right.$
	81.03 1981 seed	18.31 $\left\{ \begin{array}{l} 18.90 \\ = \Delta 1.18 \\ 17.72 \end{array} \right.$	17.36 $\left\{ \begin{array}{l} 17.51 \\ = \Delta 0.30 \\ 17.21 \end{array} \right.$
	HYSOL 1982 seed	16.57 $\left\{ \begin{array}{l} 16.98 \\ = \Delta 0.82 \\ 16.16 \end{array} \right.$	15.43 $\left\{ \begin{array}{l} 15.63 \\ = \Delta 0.59 \\ 15.04 \end{array} \right.$
	HYSOL 1983 seed	16.18 $\left\{ \begin{array}{l} 16.58 \\ = \Delta 0.80 \\ 15.78 \end{array} \right.$	15.53 $\left\{ \begin{array}{l} 15.94 \\ = \Delta 0.82 \\ 15.12 \end{array} \right.$
CAVAILLON	81.03 1981 seed	15.27 $\left\{ \begin{array}{l} 15.67 \\ = \Delta 0.80 \\ 14.87 \end{array} \right.$	14.65 $\left\{ \begin{array}{l} 14.86 \\ = \Delta 0.42 \\ 14.44 \end{array} \right.$
	81.03 1983 seed	15.02 $\left\{ \begin{array}{l} 15.55 \\ = \Delta 1.06 \\ 14.49 \end{array} \right.$	14.05 $\left\{ \begin{array}{l} 14.40 \\ = \Delta 0.70 \\ 13.70 \end{array} \right.$
	HYSOL 1982 seed	12.97 $\left\{ \begin{array}{l} 13.08 \\ = \Delta 0.22 \\ 12.86 \end{array} \right.$	13.55 $\left\{ \begin{array}{l} 13.90 \\ = \Delta 0.70 \\ 13.20 \end{array} \right.$
	HYSOL 1983 seed	13.90 $\left\{ \begin{array}{l} 14.68 \\ = \Delta 1.56 \\ 13.12 \end{array} \right.$	12.45 $\left\{ \begin{array}{l} 12.52 \\ = \Delta 0.14 \\ 12.38 \end{array} \right.$

- sown on March 22 at Aix en Provence, and on March 3 at Cavailon, both in the South of France
- every value is the average of 3 values (Aix en Provence) or 2 values (Cavailon)
- every value corresponds to 30 or 20 bulbs studied by samples of 10 bulbs
- value in refractometric value (I.R.)

ANNEX/ANNEXE/ANLAGE

PROVISIONAL LIST OF PARTICIPANTS/LISTE PROVISoire DES PARTICIPANTS/
VORLÄUFIGE TEILNEHMERLISTE

I. MEMBER STATES/ETATS MEMBRES/VERBANDSSTAATEN

BELGIUM/BELGIQUE/BELGIEN

- M. J. RIGOT, Ingénieur en chef, Directeur au Ministère de l'agriculture, 36, rue de Stassart, 1050 Bruxelles
- M. R. D'HOOGH, Ingénieur principal, Chef de service, "Protection des obtentions végétales," Ministère de l'agriculture, 36, rue de Stassart, 1050 Bruxelles

DENMARK/DANEMARK/DÄNEMARK

- Mr. F. ESPENHAIN, Head of Office, Plantenyhedsnaevnet, Tystofte, 4230 Skaelskør

FRANCE/FRANKREICH

- M. M.N. SIMON, Secrétaire général, Comité de la protection des obtentions végétales, 17, avenue de Tourville, 75007 Paris
- M. C. HUTIN, Directeur du Groupe d'études et de contrôle des variétés et des semences, INRA/GEVES, La Minière, 78280 Guyancourt
- Mlle N. BUSTIN, Secrétaire général adjoint, Comité de la protection des obtentions végétales, 17, avenue de Tourville, 75007 Paris
- M. R. BRAND, Ingénieur, Espèces horticoles, INRA/GEVES, Domaine d'Olonne, B.P. 1, Les Vignières, 84300 Cavaillon
- M. J. GUIARD, Ingénieur, Responsable des études de DHS, Plantes agricoles, INRA/GEVES, La Minière, 78280 Guyancourt
- Mme M.A. HERMITTE, Chercheur CNRS, Consultant, Comité de la protection des obtentions végétales, 17, avenue de Tourville, 75007 Paris
- M. J.F. PREVEL, Chef du Bureau de la Sélection végétale et des semences, Ministère de l'agriculture, 78, rue de Varenne, 75007 Paris

GERMANY (FED. REP. OF)/ALLEMAGNE (REP. FED. D')/DEUTSCHLAND (BUNDESREPUBLIK)

- Dr. D. BÖRINGER, Präsident, Bundessortenamt, Postfach 61 04 40, 3000 Hannover 61
- Mr. H. KUNHARDT, Leitender Regierungsdirektor, Bundessortenamt, Postfach 61 04 40, 3000 Hannover 61
- Dr. G. FUCHS, Regierungsdirektor, Bundessortenamt, Postfach 61 04 40, 3000 Hannover 61
- Mrs. U. LÖSCHER, Oberregierungsrätin, Bundessortenamt, Postfach 61 04 40, 3000 Hannover 61

HUNGARY/HONGRIE/UNGARN

- Dr. E. PARRAGH, Head of International Section, National Office of Inventions, P.O. Box 552, 1370 Budapest 5

IRELAND/IRLANDE/IRLAND

Mr. D. FEELEY, Department of Agriculture, Agriculture House, Kildare Street, Dublin 2

JAPAN/JAPON/JAPAN

Mr. M. TSUCHIYAMA, Director, Seeds and Seedlings Division, Agricultural Production Bureau, Ministry of Agriculture, Forestry and Fisheries, 1-2-1, Kasumigaseki, Chiyoda-ku, Tokyo

Mr. T. KATO, First Secretary, Permanent Mission of Japan, 10, avenue de Budé, 1202 Geneva, Switzerland

NETHERLANDS/PAYS-BAS/NIEDERLANDE

Mr. M. HEUVER, Chairman, Board for Plant Breeders' Rights, Nudestraat 11, 6700 AC Wageningen

Mr. K.A. FIKKERT, Legal Adviser, Ministry of Agriculture and Fisheries, Bezuidenhoutseweg 73, The Hague

Mr. R. DUYVENDAK, Head, Botanical Research for Agricultural Crops, RIVRO, B.P. 32, 6700 AA Wageningen

SPAIN/ESPAGNE/SPANIEN

M. J.-M. ELENA ROSSELLO, Chef du Registre des variétés, Instituto Nacional de Semillas y Plantas de Vivero, José Abascal 56, Madrid 3

Dr. J.R. PRIETO HERRERO, Consejero para Asuntos Agronomicos y de Pesca, Delegacion Permanente de España, 70, rue de Lausanne, Genève, Suisse

SWEDEN/SUEDE/SCHWEDEN

Mr. S. MEJEGÅRD, President of Division of the Court of Appeal, Armfeltsgatan 4, 115 34 Stockholm

SWITZERLAND/SUISSE/SCHWEIZ

Dr. W. GFELLER, Leiter des Büros für Sortenschutz, Bundesamt für Landwirtschaft, Mattenhofstrasse 5, 3003 Bern

M. R. GUY, Chef de service chargé de l'examen, Station fédérale de recherches agronomiques de Changins, 1260 Nyon

UNITED KINGDOM/ROYAUME-UNI/VEREINIGTES KÖNIGREICH

Mr. F.H. GOODWIN, Controller of Plant Variety Rights, Plant Variety Rights Office, White House Lane, Huntingdon Road, Cambridge CB3 0LF

Ms. J.M. ALLFREY, Deputy Controller, Plant Variety Rights Office, White House Lane, Huntingdon Road, Cambridge CB3 0LF

Mr. D.J. MOSSOP, Higher Executive Officer, Plant Variety Rights Office, White House Lane, Huntingdon Road, Cambridge CB3 0LF

UNITED STATES OF AMERICA/ETATS-UNIS D'AMERIQUE/VEREINIGTE STAATEN VON AMERIKA

Mr. S.D. SCHLOSSER, Attorney, Office of Legislation and International Affairs, Patent and Trademark Office, Department of Commerce, Washington, D.C. 20231

- Mr. L. DONAHUE, Administrator, National Association of Plant Patent Owners, 1250 Eye St., Suite 500, Washington, D.C. 20005
- Mr. W. SCHAPAUGH, Executive Vice President, American Seed Trade Association, Executive Building - Suite 964, 1030, 15th Street, N.W., Washington, D.C. 20005

II. INTERGOVERNMENTAL ORGANIZATIONS/
ORGANISATIONS INTERGOUVERNEMENTALES/
ZWISCHENSTAATLICHE ORGANISATIONEN

EUROPEAN ECONOMIC COMMUNITY (EEC)/COMMUNAUTE ECONOMIQUE EUROPEENNE (CEE)/EUROPÄISCHE WIRTSCHAFTSGEMEINSCHAFT (EWG)

- M. D.M.R. OBST, Administrateur principal, 200, rue de la Loi (Loi 84-7/9), 1049 Bruxelles, Belgique

EUROPEAN FREE TRADE ASSOCIATION (EFTA)/ASSOCIATION EUROPEENNE DE LIBRE-ECHANGE (AELE)/EUROPÄISCHE FREIHANDELSASSOCIATION (EFTA)

- Mr. J.G. PETERSSON, Legal Affairs Officer, European Free Trade Association, 9-11 rue de Varembé, 1211 Geneva 20, Switzerland

INTERNATIONAL SEED TESTING ASSOCIATION (ISTA)/ASSOCIATION INTERNATIONALE D'ESSAIS DE SEMENCES (ISTA)/INTERNATIONALE VEREINIGUNG FÜR SAATGUTPRÜFUNG (ISTA)

- Prof. A. LOVATO, President, Laboratorio Analisi Sementi, Via Filippo Re, 6, 40126 Bologna, Italy

- Mr. F. MARSCHALL, Executive Officer, P.O. Box 412, 8046 Zürich, Switzerland

III. INTERNATIONAL NON-GOVERNMENTAL ORGANIZATIONS/
ORGANISATIONS INTERNATIONALES NON GOUVERNEMENTALES/
INTERNATIONALE NICHTSTAATLICHE ORGANISATIONEN

ASSOCIATION OF PLANT BREEDERS OF THE EUROPEAN ECONOMIC COMMUNITY (COMASSO)/ASSOCIATION DES OBTENTEURS DE VARIETES VEGETALES DE LA COMMUNAUTE ECONOMIQUE EUROPEENNE (COMASSO)/VEREINIGUNG DER PFLANZENZUCHTER DER EUROPÄISCHEN WIRTSCHAFTSGEMEINSCHAFT (COMASSO).

- Mr. J.S. DENTON, Vice President of COMASSO, The Nickerson Seed Co. Ltd., Rothwell, Lincoln LN7 6DT, United Kingdom
- Mr. J. WINTER, Generalsekretär, Kaufmannstrasse 71, 5300 Bonn 1, Bundesrepublik Deutschland
- Mr. J. JOERGENSEN, Director, J. Asmussens EFTF A/S, Sankt Anna Plads 20, 1250 Copenhagen, Denmark
- M. R. PETIT-PIGEARD, Directeur général, Caisse de Gestion des Licences végétales, SICASOV, 7, rue du Coq Héron, 75001 Paris, France

INTERNATIONAL ASSOCIATION FOR THE PROTECTION OF INDUSTRIAL PROPERTY (AIPPI)/ASSOCIATION INTERNATIONALE POUR LA PROTECTION DE LA PROPRIETE INDUSTRIELLE (AIPPI)/INTERNATIONALE VEREINIGUNG FÜR GEWERBLICHEN RECHTSSCHUTZ (AIPPI)

- Dr. E. FREIHERR VON PECHMANN, Patentanwalt, Mitglied des Geschäftsführenden Ausschusses der AIPPI, Schweigerstrasse 2, 8000 München 90, Bundesrepublik Deutschland

INTERNATIONAL ASSOCIATION OF HORTICULTURAL PRODUCERS (AIPH)/ASSOCIATION INTERNATIONALE DES PRODUCTEURS DE L'HORTICULTURE (AIPH)/INTERNATIONALER VERBAND DES ERWERBS-GARTENBAUS (AIPH)

- Dr. R. TROOST, Président, Commission pour la protection des nouvelles variétés, Jan van Nassaustraaf 109, La Haye, Pays-Bas
- Mr. M.O. SLOCOCK, Vice-Chairman, Committee for Protection of Plant Breeders' Rights, Knap Hill Nursery, Woking, Surrey, United Kingdom
- Mr. O. BARTHOLOMAE, Stellvertretender Generalsekretär, Zentralverband Gartenbau, Godesberger Allee 142, 5300 Bonn 2, Bundesrepublik Deutschland
- Mr. A. GROOT, Secrétaire général du Conseil néerlandais de l'horticulture, Schiefbaanstraat 29, 2596 RC La Haye, Pays-Bas
- Mr. J.N. KRAS, Jurist, Koninginnegracht 103, The Hague, Netherlands
- Mr. A.E. LYCK, Head of Political Department, Danish Horticultural Producers' Association, P.O. Box 3073, 1508 Copenhagen, Denmark

INTERNATIONAL ASSOCIATION OF PLANT BREEDERS FOR THE PROTECTION OF PLANT VARIETIES (ASSINSEL)/ASSOCIATION INTERNATIONALE DES SELECTIONNEURS POUR LA PROTECTION DES OBTENTIONS VEGETALES (ASSINSEL)/INTERNATIONALER VERBAND DER PFLANZENZÜCHTER FÜR DEN SCHUTZ VON PFLANZENZÜCHTUNGEN (ASSINSEL)

- Dr. C. MASTENBROEK, President of ASSINSEL, de Terminator 8, 8251 AD Dronten, Netherlands
- Dr. H.H. LEENDERS, Secretary General of ASSINSEL, Chemin du Reposoir 5-7, 1260 Nyon, Switzerland
- Mr. J.L. CLAVEROTTE, Directeur, CACBA, B.P. 117, Pau 64, France
- M. L. CORNUZ, Centre horticole Lullier, 16 rue Ch. Georg, 1209 Genève, Suisse
- Prof. Dr. F.G. FAJERSSON, Vice President, Scientific Advisor Weibullsholm, Box 520, 26124 Landskrona, Sweden
- Mr. M. FERRANET, Directeur de recherches, Sté. RAGT, 18 rue Seguret Saincrie, 12000 Rodez, France
- Mr. M. KAMPS, President, Dutch Plant Breeders' Association (NKB), Stadsring 63, 3911 NH Amersfoort, Netherlands
- M. C. KISS, Président de section maïs, 18, Avenue Gallieni, 49130 Les Ponts-de-Cé, France
- Dr. P. LANGE, Syndikus, Kleinwanzlebener Saatzucht AG, Postfach 146, 3352 Einbeck, Bundesrepublik Deutschland
- Mr. J. LEEGWATER, NTZ-Holland, c/o Royal Sluis, P.O. Box 22, Enkhuizen, Netherlands
- Dr. R.C.F. MACER, The Plant Royalty Bureau Ltd., Woolpack Chambers, Market Street, Ely, Cambridgeshire CB7 4ND, United Kingdom
- Mme M. MARCHAND, Secrétaire du syndicat des établissements français de semences de maïs, SEPROMA, 3, Avenue Marceau, 75116 Paris, France
- M. L. MERCHAT, Directeur scientifique, L. Clause S.A., 91221 Bretigny/Orge, Cedex, France
- Dr. R. MEYER, Geschäftsführer, Bundesverband Deutscher Pflanzenzüchter e.V., Kaufmannstrasse 71, 5300 Bonn 1, Bundesrepublik Deutschland
- Mr. C.P. PEDERSEN, Association of Danish Plant Breeders of Fodder and Vegetable Plants, Boelshoj, 4660 Store Heddinge, Denmark

- Dr. S. ROESTEL, Geschäftsführer, F.v. Lochow-Petkus GmbH, Postfach 1311, 3103 Bergen 1, Bundesrepublik Deutschland
- M. S.J. SLUIS, Président, NTZ-Holland, c/o Royal Sluis, B.P. 22, Enkhuizen, Pays-Bas
- Mr. G.J. URSELMANN, P.O. Box No 26, 1601 BB Enkhuizen, Netherlands
- Mr. J. VELDHUYZEN VAN ZANTEN, Vice President, Dutch Vegetable Seed Trade Association, NTZ, Jan van Nassaustr. 109, Den Haag, Netherlands
- Mr. P.C.G. WEIBULL, Assistant Director, Weibullsholm Plant Breeding Institute, Box 520, 26124 Landskrona, Sweden

INTERNATIONAL COMMISSION FOR THE NOMENCLATURE OF CULTIVATED PLANTS/COMMISSION INTERNATIONALE DE NOMENCLATURE DES PLANTES CULTIVEES/INTERNATIONALE KOMMISSION FÜR DIE NOMENKLATUR DER KULTURPFLANZEN

- Mr. F. SCHNEIDER, Secretary of the Commission, Department of Horticultural Botany, RIVRO, c/o IVT, B.P. 16, 6700 AA Wageningen, Netherlands

INTERNATIONAL COMMUNITY OF BREEDERS OF ASEXUALLY REPRODUCED FRUIT TREE AND ORNAMENTAL VARIETIES (CIOPORA)/COMMUNAUTE INTERNATIONALE DES OBTENTEURS DE PLANTES ORNEMENTALES ET FRUITIERES DE REPRODUCTION ASEXUEE (CIOPORA)/INTERNATIONALE GEMEINSCHAFT DER ZÜCHTER VEGETATIV VERMEHRBARER OBST- UND ZIERPFLANZEN (CIOPORA)

- M. J. VAN ANDEL, Président, Postbus 265, 1430 AG Aalsmeer, Pays-Bas
- M. R. ROYON, Secrétaire général, 128, Les Bois de Font Merle, 06250 Mougins, France
- Mr. P. ARNERI, Représentant, A.N.F.I., Cso Monebello, San Remo, Italy
- Mr. A.W. FISCHER, Züchter, Kahlendamm 22, 3000 Hannover 51, Bundesrepublik Deutschland
- Mr. M. LECOUFLE, SNPNH, 30, Rue de Valenton, B.P. 8, 94470 Boissy Saint Léger, France

INTERNATIONAL FEDERATION OF THE SEED TRADE (FIS)/FEDERATION INTERNATIONALE DU COMMERCE DES SEMENCES (FIS)/INTERNATIONALE VEREINIGUNG DES SAATENHANDELS (FIS)

- Dr. H.H. LEENDERS, Secretary General of FIS, Chemin du Reposoir 5-7, 1260 Nyon, Switzerland
- Mr. J.A.C. VEGLIO, Vice Secretary General, FIS, Chemin du Reposoir 5-7, 1260 Nyon, Switzerland
- Mr. J. DAEMEN, American Seed Trade Association, P.O. Box 316, Johnston, Iowa, United States of America
- Dr. D.N. DUVICK, American Seed Trade Association, P.O. Box 85, Johnston, Iowa, United States of America
- Dr. H.D. LODEN, American Seed Trade Association, 147 S. Stratford Drive, Athens, Georgia 30605, United States of America
- Mr. J. WATSON, American Seed Trade Association, P.O. Box 316, Johnston, Iowa, United States of America

IV. OFFICERS/BUREAU/VORSITZ

- Mr. J. RIGOT, Chairman
- Mr. J.-M. ELENA ROSSELLO, Co-Chairman for technical questions
- Mr. M. HEUVER, Co-Chairman for administrative and legal questions

0376

IOM/I/12
Annex/Annexe/Anlage
page 6, Seite 6

V. OFFICE OF UPOV/BUREAU DE L'UPOV/BÜRO DER UPOV

Dr. H. MAST, Vice Secretary-General
Mr. A. HEITZ, Senior Officer
Mr. A. WHEELER, Senior Officer
Mr. K. SHIOYA, Associate Officer

[End of document/
Fin du document/
Ende des Dokuments]