UPOV

PLANT VARIETY PROTECTION

Gazette and Newsletter
of the
International Union for the Protection of New Varieties of Plants (UPOV)

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CONTENTS

GAZETTE

EXTENSION OF PROTECTION TO FURTHER GENERA AND SPECIES

Spain

By Order No. 6125 of April 16, 1985 (Boletín Oficial del Estado No. 109 of May 7, 1985), Establishing Protection for New Varieties of Lucerne, Maize, Soya Bean, Lettuce, Apple and Hybrids Between Almond and Peach, protection was extended to the crops mentioned in the title of the Order (except that protection for apple is limited to fruiting varieties and protection for maize to pure lines), with effect from May 8, 1985.

The duration of protection was set at 20 years for apple and hybrids between almond and peach, and at 16 years for lucerne, maize, soya bean and lettuce.

In the case of any species mentioned above which is not listed in the Annex to the International Convention for the Protection of New Varieties of Plants of December 2, 1961, the Spanish authorities will not avail themselves of the possibility provided in Article 4(4) of the Convention of limiting the benefit of the protection to the nationals of those member States of the Union which apply the Convention to that species and to natural and legal persons resident or having their registered office in any of those States. Concerning applicants from countries with which Spain has not concluded an agreement for the protection of new varieties of plants, reference is made to Plant Variety Protection No. 30, page 41.

Pursuant to the First Transitional Provision contained in the General Rules on the Protection of Plant Varieties (approved by Royal Decree No. 1674/1977 of June 10, 1977 - Boletín oficial del Estado No. 161 of July 11, 1977), applications that relate to varieties of recent creation and are to benefit from the transitional limitation of the requirement of novelty must be filed:

i) before November 8, 1985, in the case of varieties that have been the subject of either a patent granted in Spain or in any country with which Spain has established an agreement on the protection of breeders' rights or a special title of protection granted in any such country;

ii) before May 8, 1986, in the case of varieties that have been registered in a list of commercial varieties officially published in Spain.

The list of the genera and species which are covered by plant variety protection legislation is given below, with the relevant duration of protection. The Spanish common names appear in the Orders No. 29194 of November 16, 1978, No. 14072 of May 26, 1982 and No. 6125 of April 16, 1985. The English, French and German common names have been added, without guarantee of concordance, by the Office of the Union.

Plant Variety Protection in Spain/Protection des obtentions végétales en Espagne/Sortenschutz in Spanien

Español	English	Français	Deutsch	1
Alfalfa	Lucerne, Alfalfa	Luzerne	Luzerne	16
Arroz	Rice	Riz	Reis	16
Avena	Oats	Avoine	Hafer	16
Cebada	Barley	Orge	Gerste	16
Clavel	Carnation	Oeillet	Nelke	16
Girasol	Sunflower	Tournesol	Sonnenblume	16
Guisantes	Peas	Pois	Erbsen	16
Habas	Broad Beans	Fèves	Dicke Bohne, Ackerbohne	16

1 Duration in years/Durée en années/Dauer in Jahren

Español	English	Français	Deutsch	1
Hibridos de almendro por melocotonero	Hybrids between almond and peach	Hybrides entre amandier et pêcher	Hybriden zwischen Mandel und Pfirsich	20
Judias	Beans	Haricots	Bohnen	16
Lechuga	Lettuce	Laitue	Salat	16
Limonero	Lemon	Citronnier	Zitrone, Limone, Zitronatzitrone	20
Maiz (exclusivamente limitada a lineas puras)	Maize (limited to pure lines only)	Maïs (limitée aux seules lignées pures)	Mais (nur auf reine Linien beschränkt)	16
Mandarino	Mandarine	Mandarinier	Mandarine	20
Manzano (exclusivamente limitada a variedades	Apple (limited to fruiting varieties only)	Pommier (limitée aux seules variétés fruitières)	Apfel (nur auf Obstsorten beschränkt)	20
Melocotonero	Peach	Pêcher	Pfirsich	20
Naranjo	Orange	Oranger	Apfelsine, Orange	20
Nectarina	Nectarine	Nectarinier	Nektarine	20
Patata	Potato	Pomme de terre	Kartoffel	15
Pomelo	Grapefruit	Pomélo	Grapefruit	20
Rosal	Rose	Rosier	Rose	18
Soja	Soya Bean	Soja	Soja	16
Trigo	Wheat	Blé	Weizen	16
Veza comun	Common Vetch	Vesce commune	Saatwicke	16

NEWSLETTER

UPOV

The International Union for the Protection of New Varieties of Plants in 1984

State of the Union

In 1984, two States expressed their consent to be bound by the Revised Act of October 23, 1978, of the International Convention for the Protection of New Varieties of Plants (hereinafter referred to as "the 1978 Act"), namely, Israel by the deposit, on April 12, 1984, of its instrument of accession and the Netherlands by the deposit on August 2, 1984, of its instrument of acceptance. Those two instruments brought the number of States bound by the 1978 Act at the end of 1984 to thirteen.

The Union currently comprises the following 17 member States: Belgium, Denmark, France, Germany (Federal Republic of), Hungary, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, South Africa, Spain, Sweden, Switzerland, United Kingdom, United States of America.

A table summarizing the position of the various States vis-à-vis the various Acts of the Convention, as at May 1, 1985, was published on page 23 of issue No. 43 of Plant Variety Protection

Sessions

During 1984, the various bodies of UPOV met as described below. Unless otherwise specified, the sessions took place in Geneva.

The Council held its eighteenth ordinary session from October 17 to 19, 1984, under the chairmanship of Mr. J. Rigot (Belgium). The session was attended by representatives of member States and by observers from four interested non-member States, namely: Austria, Norway, Peru, Poland. The Food and Agriculture Organization of the United Nations (FAO) and the Commission of the European Communities (CEC) were also represented by observers.

The first day of the session was devoted, for the fifth year running, to a symposium. In addition to the representatives of member States, of non-member States (Austria, Chile, Egypt, Norway, Poland) and of the intergovernmental organizations (FAO, World Intellectual Property Organization (WIPO), CEC, European Patent Organization (EPO)), the Symposium was attended by almost 50 representatives of international non-governmental organizations (Association of Plant Breeders of the European Economic Community (COMASSO), International Association for the Protection of Industrial Property (AIPPI), International Association of Horticultural Producers (AIPH), International Association of Plant Breeders for the Protection of Plant Varieties (ASSINSEL), International Chamber of Commerce (ICC), International Community of Breeders of Asexually Reproduced Ornamental and Fruit Tree Varieties (CIOPORA), International Federation of the Seed Trade (FIS)) and by more than 30 individual technical and legal experts.

The subject of the 1984 Symposium was "Industrial Patents and Plant Breeders' Rights - Their Proper Fields and Possibilities for Their Demarcation." The Symposium was opened by Mr. J. Rigot, President of the Council of UPOV. The Vice Secretary-General of UPOV then introduced participants to the subject matter of the Symposium, after which the following lectures were given:

(i) "The Nature of Patents of Invention and Their Application in the Case of Living Matter," by Professor François Savignon, Center for the International Study of Industrial Property (Centre d'études internationales de la propriété industrielle), Strasbourg, France;

(ii) "The Nature of Plant Breeders' Rights (Plant Variety Protection Law) and Their Demarcation from Patentable Inventions," by Dr. Peter Lange, Legal Adviser, KWS Kleinwanzlebener Saatzucht AG, Einbeck, Federal Republic of Germany;

(iii) "Developments in Biotechnology - Dream or Reality," by Sir Ralph Riley, DSc., FRS, Secretary to the Agricultural and Food Research Council, London, United Kingdom;

(iv) "The Legal Protection of Achievements of Biotechnology as seen by a Japanese Lawyer," by Professor Nobuo Monya, Seikei University, Tokyo, Japan.

The Symposium was concluded by a panel discussion and the proceedings were summed up by the Vice Secretary-General of UPOV. Records of the proceedings are reproduced in a special UPOV publication (No. 342), in English, French, German and Spanish.

The main decisions taken by the Council at its eighteenth ordinary session were:

(i) the report of the Secretary-General on the activities of the Union in 1983 and the first nine months of 1984, the report on his management and the financial situation of the Union in 1983, and the accounts of the Union for 1983, were approved;

(ii) the proposal that biennial budgets and medium term plans should be introduced with effect from 1986 was approved;

(iii) the program and budget for 1985 were established;

(iv) the reports on the progress made by the various committees and technical working parties, including their plans for future work, were approved;

(v) the proposal that the Administrative and Legal Committee should establish a Biotechnology Subgroup to examine the implications of developments in biotechnology for the production and legal protection of new varieties of plants was approved;

(vi) the following documents were adopted:

(a) Model Administrative Agreement for International Cooperation in the Testing of Varieties;

(b) Model Form for an Application for Plant Breeders' Rights;

(c) Model Form for an Application for a Variety Denomination;

(d) UPOV Recommendations on Variety Denominations;

(vii) the proposal that a second Meeting with International Organizations should be held in 1985 was approved;

(viii) the following officers were elected for a term of three years expiring at the end of the twenty-first ordinary session of the Council (1987):

(a) Mr. J. Guiard (France) was elected Chairman of the Technical Working Party for Agricultural Crops,

(b) Mr. F. Schneider (Netherlands) was elected Chairman of the Technical Working Party for Fruit Crops,

(c) Mr. B. Bar-Tel (Israel) was elected Chairman of the Technical Working Party for Ornamental Plants and Forest Trees,

(d) Dr. J. Habben (Federal Republic of Germany) was elected Chairman of the Technical Working Party for Vegetables.

The Consultative Committee held its twenty-ninth session on April 6, 1984, and its thirtieth session on October 16 and 19, 1984, both under the chairmanship of Mr. J. Rigot (Belgium). The twenty-ninth session was devoted mainly to:

(i) noting the adoption by the twenty-second session of the Conference of FAO, in November 1983, of an "International Undertaking on Plant Genetic Resources" and to discussing the implications of that Undertaking;

(ii) the final preparations for the 1984 Symposium on "Industrial Patents and Plant Breeders' Rights - Their Proper Fields and Possibilities for Their Demarcation" (see above);

(iii) adopting the arrangements made for the celebration in Paris, in 1986, of the 25th anniversary of the signing of the UPOV Convention.

The thirtieth session was devoted mainly to the preparation of the eighteenth ordinary session of the Council (see above).

The Administrative and Legal Committee held its thirteenth session on April 4 and 5, 1984, and its fourteenth session on November 8 and 9, 1984, both under the chairmanship of Mr. M. Heuver (Netherlands). Both sessions were attended by representatives from member States; in addition, an observer from the CEC attended both sessions and an observer from the European Free Trade Association (EFTA) attended the thirteenth session.

The sessions were devoted mainly to the following matters:

The Committee noted the latest developments regarding amendments to national plant variety protection legislation either introduced or planned by member States, particularly in relation to ratification of or accession to the 1978 Act of the UPOV Convention.

The Committee examined the results of the first Meeting with International Organizations, held in November 1983, at which a number of intergovernmental and international non-governmental organizations gave their views on three subjects:

(i) minimum distances between varieties;
(ii) international cooperation;
(iii) UPOV recommendations on variety denominations.

The Committee concluded that, although it was evident from the discussions with the international organizations, and from the Technical Committee's evaluation of their outcome, that the question of minimum distances between varieties had given and would continue to give rise to certain difficulties, decisions regarding the extent of the difference that had to exist between a new variety and any other variety if the new variety was to qualify for a grant of plant variety protection could only be taken on a species-by-species basis.

As far as international cooperation in the examination of varieties was concerned, the Committee was of the opinion that the current practice of concluding bilateral agreements for such cooperation on the basis of a UPOV model

agreement was the only realistic solution. It noted that the replacement of the network of bilateral agreements by a multilateral agreement would be difficult under the present circumstances. It felt, however, that the introduction of a system for the centralized filing of applications should be envisaged as soon as possible. It recommended certain amendments to the UPOV Model Form for an Application for Plant Breeders' Rights and a new UPOV Model Administrative Agreement for International Cooperation in the Testing of Varieties. Those new models were subsequently adopted by the Council at its eighteenth ordinary session (see above). The Model Administrative Agreement is characterized by the fact that the authority of a Contracting State will in general take over the results of an examination performed by the authority of another Contracting State even if both authorities have suitable testing facilities for the species in question.

As far as the question of variety denominations was concerned, the Committee examined the request made by certain international organizations that the application of the 1973 Guidelines for Variety Denominations, which were in some respects outdated, should be discontinued, without their being replaced by an updated legal instrument of a similar character. The Committee could not share the view of those organizations and underlined once more the need for appropriate recommendations for the uniform interpretation and application of the provisions of Article 13 of the UPOV Convention which would be of assistance not only to the authorities of member States in their task of deciding on the suitability of variety denominations but also to breeders having to select and propose denominations for their varieties It therefore recommended that the 1973 Guidelines for Variety Denominations should be replaced by recommendations (rather than guidelines) which should, however, take into account as far as possible the suggestions made by the international organizations. Subsequently, the Council, at its eighteenth ordinary session, adopted the UPOV Recommendations on Variety Denominations (see above). The Council also adopted at that session, on the recommendation of the Administrative and Legal Committee, a new Model Form for an Application for a Variety Denomination.

As foreseen in the report on the Union's activities in 1983 (see Plant Variety Protection No. 41, page 21), pilot projects for the centralized examination of proposed variety denominations have been started. The projects are being carried out by the Plant Varieties Office of the Federal Republic of Germany, in Hanover, for Elatior Begonia and by the Plant Variety Rights Office of the United Kingdom, in Cambridge, for Chrysanthemum. Once the projects are operational, each of those offices will make a complete examination for the other participating offices of the acceptability of variety denominations filed with those offices.

The Committee gave detailed consideration to the possibilities for harmonizing the lists of species of which varieties are eligible for protection in the various member States of the Union. It eventually decided to continue studying that question in 1985, with a view to developing a suitable recommendation for adoption by the Council.

Finally, the Committee decided on the composition of the Biotechnology Subgroup set up by the Council (see above). The Subgroup is to act under the chairmanship of Mr. S.D. Schlosser (United States of America) and will consist of experts from member States and of the Vice Secretary-General. The task of the Subgroup will be to make a comparative study of plant variety protection and patent systems in Europe, Japan and the United States of America. Once that study is completed, the Subgroup will consider the possibility of developing suitable recommendations regarding the most appropriate form of protection for the results of biotechnological developments relating to plant varieties. The Subgroup held its first session on November 9, 1984, and decided on the organization of its rather complex work.

The Technical Committee held its twentieth session on November 6 and 7, 1984, under the chairmanship of Dr. J.-M. Elena Rosselló (Spain).

The main business of the session was as follows:

The Committee adopted ten Test Guidelines, submitted:

(i) by the Technical Working Party for Agricultural Crops, for Broad Bean and Field Bean (TG/8/4), for Cocksfoot (TG/31/6), for Timothy (TG/34/6), for Meadow Fescue and Tall Fescue (TG/39/6) (all four being revisions of the existing Test Guidelines), and for Swede (TG/89/3);

(ii) by the Technical Working Party for Fruit Crops, for Strawberry (TG/22/6) (a revision of the existing Test Guidelines) and for Persimmon (TG/92/3);

(iii) by the Technical Working Party for Ornamental Plants and Forest Trees, for Freesia (TG/27/6) (a revision of the existing Test Guidelines) and for Crown of Thorns (TG/91/3);

(iv) by the Technical Working Party for Vegetables, for Curly Kale (TG/90/3).

As in previous years, the Committee examined a number of questions, brought to its attention by the five Technical Working Parties, that had arisen from the practical experience gained by the offices of member States when conducting tests for distinctness, homogeneity and uniformity in the framework of their examination of new varieties.

The question of minimum distances between varieties, which had been one of the major topics considered at the first Meeting with International Organizations (held in November 1983), was thoroughly discussed, as far as its technical aspects are concerned, by the Committee. It concluded that there was no need to modify the interpretation of the requirement in the UPOV Convention that a variety has to be "clearly distinguishable by one or more important characteristics," and that it would not be meaningful to indicate minimum distances in the Test Guidelines for each and every characteristic. It decided that, in principle, minimum distances could only be determined on a species by species basis. If existing characteristics did not enable a variety to be distinguished then, since the reduction of the minimum distances applied so far would be rather difficult, new distinguishing characteristics should be searched for. It further decided that minimum distances should not be enlarged for species where mutants occurred frequently, since it was not yet possible to prove that a mutant really was a mutant, and noted that, unless the UPOV Convention was changed, a variety owner could not be accorded a droit de suite in respect of a mutant from his variety. These conclusions were brought to the attention of the Administrative and Legal Committee which examined the same question in the framework of its terms of reference (see above).

Among the other questions that arose were: criteria for inclusion of characteristics in Test Guidelines; possible advantages of replacing the present UPOV criteria for the testing of distinctness in varieties of certain species by the over-years analysis method; harmonization of criteria used by member States to select control varieties for the testing of homogeneity; homogeneity requirements for species for which varieties can be produced vegetatively or by seed; revision of the UPOV Model for a Report on Technical Examination to enable it to be used not only at the international level but also at the national level; harmonization of reference collections; testing of intergeneric, interspecific, synthetic and chemically induced varieties; comparison of several color charts; comparison of different electrophoretic methods; the phytosanitary status of material submitted for testing; compilation of a list of standard documents and books used in connection with variety testing; improvement of contacts with other bodies, both national and international, working on variety descriptions.

The Committee received reports on the progress of the work of the five Technical Working Parties, gave guidance on a number of questions raised by them and instructed them on the major aspects of their future work.

The Technical Working Party on Automation and Computer Programs held its second session in La Minière (France) from May 15 to 17, 1984, under the chairmanship of Mrs. V. Silvey (United Kingdom). The task assigned to the Working Party is that of studying the harmonization of automation and computer programs used by the authorities of the member States in carrying out the examination of new varieties and in generally administering their plant variety protection legislation. It continued its work on the preparation of an inventory of data bases and their structure and began studying the possibilities of linking computer centers to national data communication networks. It also discussed possibilities for the exchange of software. Other matters considered by the Working Party were: over-years analysis of examination results, harmonization of the criteria for selecting control varieties, standardization of the structure of information exchanged for the purpose of checking variety denominations and standardization of the layout of variety descriptions.

The Technical Working Party for Vegetables held its seventeenth session in Bet Dagan (Israel) from June 11 to June 15, 1984, under the chairmanship of Mr. F. Schneider (Netherlands). The Working Party completed its work on the Test Guidelines for Curly Kale and that document was subsequently adopted by the Technical Committee.

The Technical Working Party for Agricultural Crops held its thirteenth session in Lund (Sweden) from June 27 to 29, 1984, under the chairmanship of Dr. G. Fuchs (Federal Republic of Germany). In addition to its work on the five Test Guidelines for agricultural crops adopted by the Technical Committee, the Working Party completed the preparation of first drafts of the Test Guidelines for Cotton and Groundnut and of revisions of Test Guidelines for Red Clover, Rice and White Clover for submission to the professional organizations for comment.

The Technical Working Party for Ornamental Plants and Forest Trees held its seventeenth session in Hanover (Federal Republic of Germany) from August 7 to 9, 1984, under the chairmanship of Mrs. U. Löscher (Federal Republic of Germany). In addition to its work on the two Test Guidelines for ornamental plants adopted by the Technical Committee, the Working Party completed the preparation of first drafts of Test Guidelines for Elatior Begonia (revision), Heather, Lagerstroemia, Streptocarpus (revision) and Willow for submission to the professional organizations for comment.

The Technical Working Party for Fruit Crops held its fifteenth session in Valencia (Spain) from October 9 to 11, 1984, under the chairmanship of Dr. G.S. Bredell (South Africa). In addition to its work on the two Test Guidelines for fruit crops adopted by the Technical Committee, the Working Party completed the preparation of first drafts of Test Guidelines for Avocado, Kiwifruit, Olive and Quince for submission to the professional organizations for comment.

Contacts with States and Organizations

In January 1984, the Vice Secretary-General participated in a meeting of the International Association of Horticultural Producers (AIPH), held in Berlin and, in March, in a meeting between AIPH and the International Community of Breeders of Asexually Reproduced Fruit Tree and Ornamental Varieties (CIOPORA), held in Paris. The discussions mainly concerned growers' contracts. No agreement has been reached so far between AIPH and CIOPORA on that question, and it is understood that negotiations are continuing.

In May 1984, the Vice Secretary-General participated in the sixtieth Congress of the International Federation of the Seed Trade (FIS), held in Copenhagen. At that Congress, Mr. James W. Chaney (Agrigenetics Corporation, United States of America) was elected as the new President of FIS. Mr. Simon J. Sluis (Royal Sluis, Netherlands) took over the chairmanship of the Vegetable Seed Section, Dr. Goetz von Engelbrechten (Lochow-Petkus, Federal Republic of Germany) that of the Cereal Seed Section and Mr. James L. Carnes (International Seeds Inc., United States of America) that of the Forage Seed Section. Also at that Congress, FIS awarded for the first time the "FIS World Seed Prize." The award was made to Dr. Johnson E. Douglas, International Center for Tropical Agriculture (CIAT), Cali, Colombia, who compiled and edited the book "Successful Seed Programs; a Planning and Management Guide."

Immediately following the FIS Congress, the President of the Council of UPOV together with the Vice Secretary-General participated in the Congress of the International Association of Plant Breeders for the Protection of Plant Varieties (ASSINSEL), also held in Copenhagen. One of the major subjects discussed at that Congress was the impact of genetic engineering on plant breeders' rights. Also at that Congress, two motions addressed to UPOV were adopted, one relating to maize hybrids and the other to variety denominations.

In September 1984, the Vice Secretary-General read a paper on "Minimum Distances between Varieties" at the Plant Variety Rights Conference organized by the Faculty of Law, Southampton University and held in Cambridge, United Kingdom. Some eighteen papers were read at the Conference. Among the speakers were Ms. J. Allfrey, from the UK Plant Variety Rights Office, Mr. R. Royon, Secretary General of CIOPORA and Dr. R. Macer, from the Plant Royalty Bureau.

Also in September 1984, the Vice Secretary-General read a paper on "The naming of plants under the UPOV Convention" at the International Symposium on Infraspecific Classification of Wild and Cultivated Plants organized by the Systematics Association and held in Oxford, United Kingdom. Twenty-eight papers were read at the Symposium. The speakers included Mr. F.H. Goodwin, Controller of the UK Plant Variety Rights Office, Dr. J.T. Williams, Executive Secretary of the International Board for Plant Genetic Resources (IBPGR), and three of the speakers at UPOV's 1983 Symposium on Nomenclature, namely Ir. W.A. Brandenburg, Mr. C.D. Brickell and Mr. F. Schneider.

In October 1984, UPOV was represented at the thirty-sixth AIPH Congress, held in Chester (United Kingdom).

Also in October 1984, UPOV was represented at a meeting of government experts concerning biotechnology, convened by the Commission of the European Communities, held in Brussels.

In November 1984, UPOV was represented at the first session of the WIPO Committee of Experts on Biotechnological Inventions and Industrial Property, held in Geneva.

In December 1984, UPOV was represented at a seminar on "Patent and/or Plant Variety Protection for Plant Varieties Developed by Genetic Engineering," organized by the Max Planck Institute for Foreign and International Patent, Copyright and Competition Law, held in Munich.

Also during the period under review, a number of persons visited the Office of the Union to inform themselves on plant variety protection matters. The following visits were of particular note:

(i) in February 1984, the Vice Secretary-General received a visit from Mr. P.M. Thomas, from the Policy Branch of the Australian Patent, Trade Marks and Designs Office, Woden, who informed him that the Senate Standing Committee on National Resources had completed its report on the Plant Variety Protection Bill. The report has been published in May under the title "Plant Variety Rights" by the Australian Government Publishing Service in Canberra (ISBN 0644 029250);

(ii) in May 1984, he was visited by Dr. R.B. Wynn-Williams, from the Department of Scientific and Industrial Research, New Zealand, and exchanged views with him on the International Undertaking on Plant Genetic Resources adopted the previous November by the Conference of the Food and Agriculture Organization of the United Nations (FAO);

(iii) also in May 1984, he was visited by Dr. E.J. Fuentes, Head of the Technical Seed Unit at the Chilean Ministry of Agriculture, who was accompanied by Mr. P. Barros, First Secretary at the Permanent Mission of Chile in Geneva, and there was a continuation of the discussions on the possibility of Chile becoming a member of UPOV;

(iv) in August 1984, he was visited by Mr. Ozeki, a journalist with the Japanese newspaper "Asahi Shimbun," who intended to write one or more articles on the subject of genetic engineering and plant breeders' rights;

(v) also in August 1984, Dr. R. Troost, Secretary to the Horticultural Seed Trade Association of the Netherlands (NTZ) visited him to introduce his successor Dr. J.A.J.M. Geertman.

Publications

33. In 1984, the Office of the Union published four issues of Plant Variety Protection; the Records of the 1983 Symposium on "Nomenclature," in English, French, German and Spanish (UPOV publications 341 (E), (F), (G) and (S), respectively); ten Guidelines for the Conduct of Tests for Distinctness, Homogeneity and Stability (for details, see the above report on the work of the Technical Committee); and regular supplements to the Collection of the Texts of the UPOV Convention and Other Important Documents Established by UPOV (UPOV publications 644 (E), (F) and (G), respectively), including, in particular, the following revised models: (i) Model Administrative Agreement for International Cooperation in the Testing of Varieties; (ii) UPOV Model Form for an Application for Plant Breeders' Rights; (iii) UPOV Model Form for an Application for a Variety Denomination; and the UPOV Recommendations on Variety Denominations (UPOV publication INF/10).

MEMBER STATES

Japan: Appointment of a New Alternate Representative to the Council

Mr. Kiichiro Araki, newly appointed Deputy Director of the Seeds and Seedlings Division in the Japanese Ministry of Agriculture, Forestry and Fisheries, has been appointed alternate representative of Japan on the UPOV Council, in replacement of Mr. Toshiharu Ishiki, who has taken up another function.

South Africa: Modification of Fees

A new fee tariff has been introduced with effect from May 1, 1985, by Regulations No. R. 990 of May 3, 1985, Relating to Plant Breeders' Rights - Amendment. Details are given in the "Legislation" subsection, starting on page 23 below.

United Kingdom: Modification of Fees

A new fee tariff has been introduced with effect from April 8, 1985, for both plant breeders'rights and National List of Varieties purposes, by The Plant Breeders' Rights (Fees) Regulations 1985 and The Seeds (National Lists of Varieties) (Fees) (Amendment) Regulations 1985. Some details of the new tariff are given below (in £).

Crop	Cereals, Potatoes and Oilseed Rape		Other Agricultural Crops (b)		Others (c)	
Purpose (a)	PBR	NL	PBR	NL	PBR	NL
Application	260	-	200	-	100	-
Tests or examination (d)	505	505	340	340	190	190
VCU tests (e)	-	1,050	-	-	-	-
Grant of Rights	75	-	75	-	75	-
Renewals (f)						
Years 2 to 5	230	120	165	110	100	80
Years 6 et seq.	305	205	275	175	135	120

(a) PBR = Plant breeders' rights NL = National Listing.
(b) For PBR purposes: fodder, oil and fibre plants (excluding oilseed rape), field beans and field peas.
For NL purposes: any other specified agricultural crop.
(c) For PBR purposes: vegetable, decorative and fruit species.
For NL purposes: vegetables only.
(d) Fee payable for tests in any one year, except for year-round chrysanthemums (each flowering season) and cymbidiums (each examination).
Where a report is purchased from the testing authority in another country, the fee payable is £100.
Test fees are charged for National Listing applications only in those cases where there is a Plant Breeders' Rights Scheme in operation and fees have not been paid in connection with tests on an application for a grant of plant breeders' rights.
(e) VCU = Value for cultivation and use.
Fee payable in the first year of tests only and in respect of wheat, barley and oats only.
(f) No fees are payable for the annual renewal of vegetable varieties well known on January 1, 1973, of which seed is marketed only as "standard seed."

SOUTH AFRICA

Regulations Relating to Plant Breeders' Rights*

Consolidated Text of Regulations No. R. 2630 of December 24, 1980, as Amended by Regulations No. R. 37 of January 6, 1984 and No. R. 990 of May 3, 1985

Regulation 1

Definitions

Unless the context otherwise indicates, words and phrases in these regulations shall have the meaning assigned thereto in the Act, and-

"Director-General" means the Director-General: Agriculture; and

"the Act" means the Plant Breeders' Rights Act, 1976 (Act 15 of 1976[1]).

Regulation 2

Kinds of Plants in Respect of Which Plant Breeders' Rights May Be Granted

A plant breeder's right, the content and mode of exercise of which are as determined in the Act and these regulations, may be granted in respect of new varieties of the kinds of plants specified in column 1 of Table 1.

Regulation 3

Requirements for New Varieties

(1) A variety of a kind of plant referred to in regulation 2 shall be deemed to be a new variety if-

(a) propagating material thereof has not at the time of the application for the relevant plant breeder's right and with the agreement of the breeder concerned-

(i) been sold in the Republic for longer than one year;

(ii) in the case of any fruit tree or any root-stock thereof, any ornamental tree, any vine or root-stock thereof, or any forest tree, been sold for longer than six years, and in the case of any other kind of plant, been sold for longer than four years in a convention country or an agreement country;

(b) [Repealed]

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* Consolidated text prepared by the Office of the Union from the texts published in the Government Gazette:

Regulations No. R. 2630 of December 24, 1980: G.G of December 24, 1980 (Vol. 186, No. 7349);
Regulations No. R. 37 of January 6, 1984: G.G of January 6, 1984 (Vol. 223, No. 9024);
Regulations No. R. 990 of May 3,, 1985: G.G of May 3, 1985 (Vol. 239, No. 9728);

1 As last amended by Act No. 38 of 1983 (G.G. of April 20, 1983 (Vol. 214, No. 8663).

(c) it is by reason of any important characteristic clearly distinguishable from any other variety of the same kind of plant, the existence of which is a matter of common knowledge at the time of the application for the relevant plant breeder's right, whatever the origin, artificial or natural, of the initial variation from which it resulted, may be;

(d) it is sufficiently homogeneous having regard to the particular features of the sexual reproduction or vegetative propagation thereof;

(e) it is stable with regard to the essential characteristics thereof and remains true to the description thereof after repeated reproduction or propagation or, where the breeder has defined a particular cycle of reproduction or multiplication, at the end of each cycle.

(2) Notwithstanding the provisions of subregulation (1)(a) the registrar may, within six months from the date on which the name of a kind of plant is specified in column 1 of Table 1 for the first time, in his discretion consider an application for the grant of a plant breeder's right in respect of a variety of the kind of plant concerned regardless of the fact that such variety is generally known for longer periods than those specified in that subregulation.

(3) For the purposes of paragraphs (c) of subregulation (1) the existence of a variety shall be deemed to be a matter of common knowledge if the variety at the time of the relevant application for a plant breeder's right-

(a) was entered in an official list of varieties, or an application for such entry is under consideration;

(b) is included in a reference collection accessible to the public;

(c) has been precisely described in a publication which is accessible to the public; or

(d) has otherwise come to the knowledge of the public.

(4) A characteristic referred to in subregulation (1)(c) shall be such that is clearly recognizable and precisely describable.

Regulation 4

Submission of Applications

(1) An application for the grant of a plant breeder's right shall be submitted to the registrar in the form set out in Schedule A*.

(2) Such application shall be accompanied by-

(a) a description, in a technical questionnaire obtainable from the registrar for this purpose, of a typical plant of the variety concerned and of the procedure to be used for the maintenance and reproduction of the variety concerned;

(b) such coloured illustrations as are required by the registrar, of a typical plant of the variety concerned;

(c) an indication, in the form set out in Schedule B*, of the denomination proposed for the variety concerned;

(d) written proof, where applicable, of the title or authority of the legal representative or agent submitting such application;

(e) the application fee specified in paragraph 1 of Table 2.

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* Not reproduced here.

Regulation 5

Priority of Applications

(1) If more than one application for the grant of a plant breeder's right in respect of the same new variety is received by the registrar, he shall subject to the provisions of section 8(2) of the Act, give priority to the application first received.

(2) A claim to give priority in terms of section 8(2) of the Act to an application for the grant of a plant breeder's right in respect of a new variety which is preceded by an application by or on behalf of the same applicant for the protection of the rights in the same new variety in a convention country or an agreement country, and which has been deposited in accordance with the laws in force in that country shall-

(a) be submitted to the registrar in the form set out in Schedule C*;

(b) be submitted within twelve months of the date on which the application for the protection of the rights in the same new variety was duly deposited in a convention country or an agreement country;

(c) be accompanied by the fee specified in paragraph 2 of Table 2.

(3) Such claim for priority shall within three months of the date on which it was submitted to the registrar, be confirmed by lodging with the registrar a copy, certified as correct by the appropriate authority in the convention country or agreement country in question, of each document which constitutes the relevant preceding application.

(4) The period referred to in section 8(4) of the Act, within which an application thus given priority shall be confirmed by supplementing it in any respect necessary in order to comply with the requirements of the Act, shall be four years: Provided that if the preceding application in a convention country or an agreement country is withdrawn or rejected, the registrar may require that such supplementation be completed at an earlier date.

Regulation 6

Denominations for New Varieties

(1) The denomination which is proposed for a new variety in terms of regulation 4(2)(c) shall-

(a) be suitable to identify a variety;

(b) not be such as to be liable to mislead or to lead to confusion concerning the characteristics, value or identity of the variety in question or the identity of the breeder thereof;

(c) be different from each denomination which distinguishes existing varieties of the same or a closely related kind of plant in a convention country or an agreement country;

(d) subject to the provisions of subregulation (3) not be identical with or similar to, or liable to lead to confusion with a mark which enjoys the protection accorded thereto by the Trade Marks Act, 1963 (Act 62 of 1963), and which applies to propagating material or the use in connection therewith or in connection with a product thereof;

(e) not be inimical to public order or contrary to morality.

(2) If the registrar considers a denomination proposed for a new variety as unsuitable, the applicant concerned shall submit a translation thereof or some other denomination acceptable to the registrar, within two months of the date on which he was directed in writing to do so.

(3) Notwithstanding anything to the contrary contained in these regulations-

(a) a mark referred to in subregulation (1)(d) may only be approved as a denomination for a new variety if the applicant concerned submits documentary proof that the holder of the mark concerned renounces his right to such mark as from the date on which a plant breeder's right in the new variety is granted;

(b) the denomination approved by the registrar for a new variety in respect of which protection has been granted by, or an application for protection has been lodged with the appropriate authority in a convention country or an agreement country in accordance with the laws in force in that country shall be the same as the denomination thus protected or thus applied for in such country, on condition however that the provisions of subparagraph (a) are complied with and that a priority claim on such denomination is not proved by another person.

Regulation 7

Publication of Applications

The particulars specified in paragraph 1 of Table 3* shall be published in terms of section 13 of the Act in respect of an application for the grant of a plant breeder's right which has not been rejected by the registrar in terms of section 11 of the Act.

Regulation 8

Grant of Provisional Protection

An application for a protective direction in terms of section 14 of the Act with a view to the provisional protection of the plant breeder's right which may be granted in respect of a new variety shall be submitted to the registrar in the form set out in Schedule D*.

Regulation 9

Objections Against Applications for Plant Breeders' Rights

(1) An objection to the grant of a plant breeder's right shall-

(a) be lodged with the registrar in writing within six months from the date on which the particulars relating to the application concerned were published in terms of section 13(1) of the Act;

(b) state the name and address of the person objecting;

(c) give the published particulars of the application concerned;

(d) subject to the provisions of section 17(2) of the Act, state the grounds on which it is based;

(e) be accompanied by the fee specified in paragraph 3 of Table 2.

(2) The registrar may direct that such objection be substantiated by such proof as he may deem necessary.

(3) A person thus objecting shall serve a copy of any document and other proof lodged in terms of subregulations (1) and (2) on the person who submitted the application concerned and shall furnish the registrar with proof of service thereof.

(4) A counter-statement against such objection by the person who has submitted the application concerned shall-

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* Not reproduced here.

(a) be lodged with the registrar in writing within 60 days, or such further period as the registrar may allow, from the date on which such person has received the relevant objection and other proof referred to in subregulation (2);

(b) give the published particulars of the application concerned;

(c) set out the particulars of each ground upon which any allegation of the person objecting, is contested.

(5) The person lodging such counter-statement shall serve a copy thereof on the person objecting and shall furnish the registrar with proof of service thereof.

(6) The registrar shall publish the particulars specified in paragraph 2 of Table 3* in respect of an application for the grant of a plant breeder's right when such application has lapsed because an objection against it has been upheld.

Regulation 10

Consideration and Examination of Applications

(1) When the registrar himself undertakes tests and trials in terms of section 19(2) of the Act in order to determine whether a variety of a kind of plant specified in column 1 of Table 1 is a new variety, the examination fee specified in column 2 of the said Table opposite the name of the kind of plant concerned shall be payable to the registrar by the applicant concerned.

(2) The amount payable in respect of the cost of results which are obtained from the appropriate authority in a convention country or an agreement country in terms of section 19(4) and (6) of the Act shall be calculated at the rate of exchange between the monetary units of the Republic and the country concerned as on the date of payment of such costs to the appropriate authority concerned.

(3) The amount specified in paragraph 4 of Table 2 shall be payable when the registrar provides the results of tests and trials undertaken by him to the appropriate authority in a convention country or an agreement country.

(4) The particulars specified in paragraphs 3 and 4 of Table 3* shall respectively be published in respect of-

(a) a plant breeder's right which has been granted;

(b) the refusal to grant a plant breeder's right.

Regulation 11

Period of Plant Breeders' Rights

The period for which a plant breeder's right in respect of a variety of a kind of plant specified in column 1 of Table 1 is granted shall be as specified in column 3 of the said Table opposite the name of the kind of plant concerned.

Regulation 12

Payment of Annual Fee

(1) The annual fee which is, in terms of section 22 of the Act, annually payable to the registrar during the currency of a plant breeder's right in respect of a variety of a kind of plant specified in column 1 of Table 1 by the holder of such right shall be the amount specified in column 4 of the said Table opposite the name of the kind of plant concerned.

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* Not reproduced here.

(2) If the annual fee for a particular year has not been paid prior to or on 31 January of that year, an additional amount of 10 per cent of the appropriate fee referred to in subregulation (1) shall be payable in terms of section 22(2) of the Act for each month or portion of a month of late payment.

Regulation 13

Period of Sole Rights

The holder of a plant breeder's right in respect of a variety of a kind of plant specified in column 1 of Table 1 shall during the period specified in column 5 of the said Table opposite the name of the kind of plant in question, have the sole rights referred to in section 23 of the Act.

Regulation 14

Notice of Licences

(1) The holder of a plant breeder's right shall notify the registrar in the form set out in Schedule E*, of each licence which was issued by him in terms of section 25 of the Act.

(2) Such notice shall be lodged with the registrar within 30 days of the date of issue of the licence concerned.

Regulation 15

Application for Compulsory Licences

(1) An application for the issue of a compulsory licence in respect of a plant breeder's right shall-

(a) be lodged in writing with the registrar;

(b) give the published particulars of the application concerned;

(c) set out the reasons why the applicant concerned considers the refusal by the holder of the plant breeder's right concerned, or the conditions imposed by him, to be unreasonable;

(d) be accompanied by the fee specified in paragraph 5 of Table 2.

(2) The registrar may direct that such application be substantiated by such proof as he may deem necessary.

(3) A person thus applying shall serve a copy of any document and other proof lodged in terms of subregulations (1) and (2) on the holder of the relevant plant breeder's right, and shall furnish the registrar with proof of service thereof.

(4) The holder of such plant breeder's right may within 60 days from the date of receipt of the documents and other proof referred to in subregulation (2), or within such further time as the registrar may allow, lodge a counter-statement with the registrar in which the particulars of any ground upon which he contests the application in question are set out.

(5) The holder of such plant breeder's right shall serve a copy of the counter-statement on the person who made the application and shall furnish the registrar with proof of service thereof.

(6) If the person who made the application and the holder of the relevant plant breeder's right at any stage after the application has been lodged with the registrar, reach an agreement with regard to the issue of a licence, the person who made the application shall inform the registrar of the agreement, whereupon the application shall lapse.

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* Not reproduced here.

Regulation 16

Transfer of Plant Breeders' Rights

(1) The holder of a plant breeder's right shall notify the registrar in the form set out in Schedule F* of the fact that such right or any part thereof has been transferred to another person.

(2) Such notice shall-

(a) be lodged within 30 days of the date on which the plant breeder's right in question or a portion thereof was transferred;

(b) be accompanied by the fee specified in paragraph 6 of Table 2.

(3) When the registrar has been notified of the transfer of a plant breeder's right as contemplated in subregulation (1), he shall publish the particulars specified in paragraph 5 of Table 3*, in respect of such transfer.

Regulation 17

Alteration of Denominations

(1) An application for the alteration or supplementation of the denomination approved for a variety in respect of which a plant breeder's right has been granted shall-

(a) be lodged with the registrar by the holder of the plant breeder's right concerned in the form set out in Schedule G*;

(b) be accompanied by the fee specified in paragraph 7 of Table 2.

(2) If the registrar intends to approve the alteration or supplementation of the denomination of a variety, he shall publish the particulars specified in paragraph 6 of Table 3* in respect thereof.

(3) An objection against the intended approval of an alteration or supplementation shall-

(a) be lodged with the registrar in writing within three months from the date on which the particulars thereof were published in terms of section 32(4) of the Act;

(b) state the name and address of the person objecting;

(c) give the published particulars of the application concerned;

(d) state the grounds on which it is based;

(e) be accompanied by the fee specified in paragraph 8 of Table 2.

(4) The registrar may direct that such objection be substantiated by such proof as he may deem necessary.

(5) The registrar shall publish the particulars specified in paragraph 7 of Table 3* in respect of the denomination of a variety after he has approved an alteration or supplementation thereof.

Regulation 18

Termination of Plant Breeders' Rights

(1) An objection against the intended termination of a plant breeder's right of which the holder thereof or of a licence therein has been notified as

* Not reproduced here.

contemplated in section 33(2) of the Act shall-

(a) be submitted in writing by the holder of the plant breeder's right concerned or the holder of a licence therein;

(b) be lodged with the registrar within 60 days from the date on which a person referred to in paragraph (a) has been notified thereof;

(c) state the name and address of the person objecting;

(d) give the published particulars of the plant breeder's right concerned;

(e) state the grounds on which it is based;

(f) be accompanied by the fee specified in paragraph 9 of Table 2.

(2) The registrar shall publish the particulars specified in paragraph 8 of Table 3* in respect of the termination of a plant breeder's right.

(3) The holder of a plant breeder's right shall return the certificate of registration issued in respect thereof to the registrar within 30 days after the date of the publication in question referred to in subregulation (2).

Regulation 19

Voluntary Surrender of Plant Breeders' Rights

(1) A notice by the holder of plant breeder's right that he is surrendering such right shall-

(a) be submitted to the registrar in the form set out in Schedule H*;

(b) be accompanied by-

(i) the fee specified in paragraph 10 of Table 2;

(ii) the certificate of registration issued in respect of the plant breeders' right concerned.

(2) The registrar shall publish the particulars specified in paragraph 8 of Table 3* in respect of the voluntary surrender of a plant breeder's right.

Regulation 20

Recognition of Agents

(1) The registrar may recognise any person as an agent if he is satisfied that such person-

(a) is of good standing;

(b) has suitable qualifications or adequate experience;

and is therefore able to represent any person applying for the grant of a plant breeder's right as well as the holder of such right, and to further the interests of such person or holder.

(2) A notice in connection with the designation or substitution of an agent shall-

(a) be furnished by a person who has applied for the grant of a plant breeder's right or the holder of such right;

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* Not reproduced here.

(b) be lodged with the registrar in the form set out in Schedule I*;

(c) be submitted within 30 days after the date on which such designation or substitution has come into effect.

Regulation 21

Notice of Change of Address

Any change of the address which for purposes of correspondence is specified in an application for the grant of a plant breeder's right, or of an address entered in the register, shall-

(a) as the case may be, be furnished by-

(i) the person who has applied for the grant of the plant breeder's right concerned;

(ii) the holder of the plant breeder's right concerned;

(iii) the legal representative or agent of such applicant or holder; or

(iv) the person to whom a licence or compulsory licence has been issued in respect of the plant breeder's right concerned;

(b) be lodged with the registrar in the form set out in Schedule J*;

(c) be submitted within 30 days after the date on which such change of address has come into effect.

Regulation 22

Register of Plant Breeders' Rights

(1) In the register of plant breeders' rights referred to in section 4 of the Act shall be entered-

(a) the kind of plant to which each new variety belongs;

(b) the denomination of each new variety and any approved alteration thereof;

(c) the principal characteristics of each new variety and, where varieties are produced by a cross between certain hereditary components, the principal characteristics of such components;

(d) the full name and address of the original breeder of each new variety;

(e) the name and address of the holder of the plant breeder's right in each new variety and the name and address of each person to whom such right has been transferred;

(f) the name and address of the person who has been appointed as the agent of any person referred to in paragraph (e);

(g) the date of inception of the plant breeder's right in each new variety;

(h) the date on which a plant breeder's right ceases to exist and the reason therefor;

(i) the name and address of each person to whom a licence has been issued in terms of the Act for the use of a plant breeder's right;

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* Not reproduced here.

(j) the name and address of each person to whom a compulsory licence has been issued in terms of the Act for the use of a plant breeder's right; and

(k) such other particulars as the registrar may, subject to the provisions of the Act, deem necessary.

(2) The fee specified in paragraph 11 of Table 2 shall be payable by a person requiring inspection of the register of plant breeders' rights.

Regulation 23

Inspection and Copies of Documents

(1) Any person-

(a) desiring to inspect a document submitted to the registrar in connection with an application for the grant of a plant breeder's right;

(b) requiring a copy of any particulars in the register, or of a document referred to in paragraph (a);

(c) requiring a certificate by the registrar in connection with particulars or a document referred to in paragraph (b);

shall apply therefor in the form set out in Schedule K*.

(2) Such application shall be accompanied by the appropriate application fee specified in paragraph 12 or 13 of Table 2.

Regulation 24

Appeal to Minister

(1) An appeal in terms of section 42 of the Act, shall-

(a) be lodged with the Director-General in writing within 60 days after the date on which the registrar has given the appellant written notice of the decision or action concerned;

(b) state the reference number and date of the document by means of which such person was notified of that action or decision;

(c) state the grounds on which the appeal is based;

(d) be accompanied by the fee specified in paragraph 14 of Table 2.

(2) An appeal shall-

(a) when forwarded by post, be addressed to-

The Director-General: Agriculture
Private Bag X116
Pretoria
0001; or

(b) when delivered by hand, be delivered to-

The Director-General: Agriculture
Agriculture Buildings
Beatrix Street
Pretoria

* Not reproduced here.

Regulation 25

Payment of Fees

(1) Postage on and delivery costs of any application or document submitted in terms of these regulations, as well as on or of anything else pertaining thereto, shall be prepaid.

(2) Any fee payable in terms of these regulations, shall be paid by means of a cheque, postal order or money order made out in favour of the Director-General: Agriculture and Fisheries: Provided that if such fee is delivered by hand, it may be paid in cash.

(3) Subject to the provisions of section 42(8) of the Act, fees which are paid in terms of these regulations shall not be repayable.

Regulation 26

Address for the Submission of documents

Any application, notice, objection or other document which is to be submitted to the registrar in terms of these regulations shall-

(a) when forwarded by post, be addressed to-

The Registrar of Plant Breeders' Rights
Private Bag X179
Pretoria
0001; or

(b) when sent by rail or delivered by hand, be addressed to or delivered to-

The Registrar of Plant Breeders' Rights
Division of Plant and Seed Control
Block V
Agriculture Building
Hamilton Street
Pretoria

Regulation 27

Supply and Completion of Forms

(1) The forms indicated in the Schedules shall be set out on A4-size paper as shown therein and shall have a margin of 30 mm wide on the left-hand side thereof.

(2) Such forms shall be supplied by any person required to use them.

(3) Such forms, as well as all other documents and copies of documents lodged in terms of the Act and these regulations shall, unless the registrar or the Director-General, as the case may be, directs otherwise, be written, typewritten or printed-

(a) in one of the official languages of the Republic;

(b) in legible letters and figures with deep permanent black ink;

(c) on strong white paper of a satisfactory quality; and

(d) on one side of such paper.

Regulation 28

Offences and Penalties

Any person who contravenes or fails to comply with any provision or requirement of these regulations shall be guilty of an offence and liable on conviction to a fine not exceeding R200 or to imprisonment for a period not exceeding six months.

Regulation 29

Repeal of Regulations and Notices

(1) The regulations published under Government Notice R. 2185 of 28 October 1977 and the amendments thereof published under Government Notices R. 122 of 20 January 1978, R. 1581 of 4 August 1978, R. 996 of 11 May 1979 and R. 1611 of 20 July 1979 are hereby repealed.

(2) Government Notices R. 2184 of 28 October 1977, R. 123 of 20 January 1978, R. 1582 of 4 August 1978, R. 997 of 11 May 1979 and R. 1610 of 20 July 1979 are hereby repealed.

Regulation 30

Date of Commencement*

These regulations shall come into operation on 2 January 1981.

* Of Regulations No. R. 2630. of December 24, 1980. Regulations No. R. 990 of May 3, 1985, entered into operation on May 1, 1985.

TABLE 1*

KINDS OF PLANTS, FEES AND PERIODS OF RIGHTS

[Regulations 10(1), 12(1)]

Latine	English	Français	Deutsch	A	B	C	D
Actinidia chinensis Planch.	Kiwifruit	Actinidia, Groseille de Chine	Kiwifrucht	260	18	25	8
Allium cepa L.	Onion	Oignon	Zwiebel	180	20	25	8
Aloë spp.	Aloe	Aloès	Aloe, Bitterschopf	260	18	25	8
Amygdalus spp.	Almond	Amandier	Mandel	260	20	25	8
Ananas comosus (L.) Merr.	Pineapple	Ananas	Ananas	260	18	25	8
Arachis spp.	Groundnut	Arachide	Erdnuss	180	15	35	5
Aulax, Leucadendron, Leucospermum, Mimetes, Orothamnus, Paranomus, Protea, Serruria	Proteas	Proteas	Proteen	260	18	25	8
Avena spp.	Oats	Avoine	Hafer	260	15	35	5
Beta vulgaris L. var. esculenta L.	Garden beet	Betterave rouge, Betterave potagère	Rote Rübe	180	15	25	5
Brassica oleracea L. convar. botrytis (L.) Alef. var. botrytis	Cauliflower	Chou-fleur	Blumenkohl	180	15	25	5
Brassica oleracea L. var. capitata L.	Cabbage	Chou pommé	Kopfkohl	180	15	25	5
Brassica rapa L.	Turnip	Navet	Herbstrübe, Mairübe	180	15	25	5

* This table is an adapted form of the one published in Government Gazette No. 7349. The Latin names have been adapted were necessary to the latest knowledge in plant taxonomy. The English names are the ones published in the Governement Gazette. The French and German common names have been added by the Office of the Union, without guarantee of concordance.

The abbreviations have the following meaning:

A = Examination fee (in Rands)
B = Period of plant breeder's right (in years)
C = Annual fee (in Rands)
D = Period of sole rights (in years)

Latine	English	Français	Deutsch	A	B	C	D
Capsicum spp.	Sweet pepper	Poivron, Piment	Paprika	180	15	18	5
Carica papaya L.	Pawpaw	Papayer, Arbre à melon	Melonenbaum, Papaya	260	18	25	8
Carya illinoinensis (Wangenh.) C. Koch	Pecan nut	Pacanier	Pekan, Pekannuss	345	20	25	8
Cenchrus ciliaris L.	-	Cenchrus cilié	Büffelgras	180	15	25	5
Chrysanthemum spp.	Chrysanthemum	Chrysanthème	Chrysantheme	260	15	35	5
Citrullus lanatus (Thunb.) Matsum. et Nakai	Water-melon	Pastèque	Wassermelone	180	15	25	5
Citrus spp.	Sweet orange, Lemon, Grapefruit, loose skin types, other (Bitter Seville, Lime, Kumquat)	Oranger, Citronnier, Pomélo, types à écorce lâche, autres types (Bigaradier, Limettier, Kumquat)	Orange, Zitrone, Grapefruit, Arten mit loser Schale, andere Arten (Pomeranze, Saure Limette, Kumquat)	432	25	53	10
Coffea arabica L.	Coffee	Caféier	Kaffee	260	18	25	8
Cucumis spp.	Sweet melon, Cucumber	Melon, Concombre	Melone, Gurke	180	15	25	5
Cucurbita spp.	Pumpkin, Squash	Potiron, Giraumon Courge, Pâtisson, Citrouille	Kürbis	180	15	25	5
Cydonia spp.	Quince	Cognassier	Quitte	260	18	25	8
Dactylis glomerata L.	Cocksfoot	Dactyle	Knaulgras	180	15	25	5
Daucus carota L.	Carrot	Carotte	Möhre	180	15	25	5
Dianthus caryophyllus L.	Carnation	Oeillet	Nelke	260	15	35	5
Eragrostis curvula (Schrad.) Nees	-	Eragrostis courbé	Behaartes Liebegras	180	15	35	5
Euphorbia pulcherrima Willd. ex Klotzsch	Poinsettia	Poinsettia	Poinsettie, Weihnachtsstern	260	15	25	5
Fragaria ananassa Duch.	Strawberry	Fraisier	Erdbeere	180	15	25	5

Latine	English	Français	Deutsch	A	B	C	D
Freesia spp.	Freesia	Freesia	Freesie	260	15	25	5
Gladiolus spp.	Gladiolus	Glaïeul	Gladiole	260	15	35	5
Glycine max (L.) Merrill	Soya bean	Soja	Sojabohne	180	15	25	5
Gossypium hirsutum L.	Cotton	Cotonnier	Baumwolle	260	15	35	5
Helianthus annuus L.	Sunflower	Tournesol, Soleil	Sonnenblume	180	15	35	5
Hibiscus cannabinus L.	Kenaf	Kénaf, Chanvre de de Guinée	Ambari, Dekkan-Hanf	260	15	25	5
Hordeum spp.	Barley	Orge	Gerste	260	15	43	5
Humulus lupulus L.	Hops	Houblon	Hopfen	260	18	25	8
Lachenalia spp.	Lachenalia	Lachenalia, Coucou du Cap	Lachenalia	260	15	25	5
Lactuca sativa L.	Lettuce	Laitue	Salat	180	15	18	5
Litchi chinensis Sonn.	Litchi	Litchi	Litschi	345	20	25	8
Lolium spp.	Rye grass	Ray-grass	Weidelgras	260	15	35	5
Lupinus spp.	Lupin	Lupin	Lupine	180	15	25	5
Lycopersicon lycopersicum (L.) Karst. ex Farwell	Tomato	Tomate	Tomate	260	18	53	8
Macadamia spp.	Macadamia	Macadamia	Macadamia	260	20	43	8
Malus spp.	Apple	Pommier	Apfel	345	25	43	8
Mangifera indica L.	Mango	Manguier	Mango	345	20	35	8
Medicago sativa L.	Lucerne	Luzerne	Blaue Luzerne	260	15	35	5
Musa cavendishii Lamb.	Banana	Bananier	Banane	260	18	25	8
Narcissus L.	Narcissus	Narcisse	Narzisse	260	15	25	5
Ornithogalum spp.	Chinkerinchee	Ornithogale, Dame d'onze heures	Milchstern, Vogelmilch, Stern von Bethlehem	260	15	25	5

Latine	English	Français	Deutsch	A	B	C	D
Oryza sativa L.	Rice	Riz	Reis	180	15	25	5
Passiflora edulis Sims	Grenadilla	Barbadine	Purpurgranadilla	260	18	25	8
Pelargonium spp.	Geranium (Pelargonium)	Géranium (Pelargonium)	Pelargonie	260	15	25	5
Pennisetum typhoides (Burm.) Stapf et C.E. Hubb.	Pearl millet	Pénicillaire, Mil à chandelle	Federborstengras	180	15	25	5
Persea americana P. Mill.	Avocado	Avocatier	Avocado	260	20	35	8
Phaseolus coccineus L.	Kidney bean	Haricot d'Espagne	Prunkbohne	180	15	35	5
Phaseolus vulgaris L.	Bean	Haricot	Gartenbohne	180	15	35	5
Pisum spp.	Pea	Pois	Erbse	180	15	35	5
Prunus armeniaca L.	Apricot	Abricotier	Aprikose	260	18	43	8
Prunus avium (L.) L.	Sweet cherry	Cerisier (cerises douces : guignes, bigarreaux)	Süsskirsche	260	18	25	8
Prunus cerasus L.	Sour cherry	Cerisier (cerises acides : griottes, amarelles)	Sauerkirsche	260	18	25	8
Prunus domestica L.	Plum	Prunier	Pflaume	345	20	43	8
Prunus persica (L.) Batsch	Peach	Pêcher	Pfirsich	345	25	43	8
Prunus salicina Lindl.	Japanese Plum	Prunier du Japon	Japanische Pflaume	345	20	43	8
Psidium guajava L.	Guava	Goyavier	Guayave	260	18	35	8
Pyrus communis L.	Pear	Poirier	Birne	345	25	43	8
Ricinus communis L.	Castor bean	Ricin	Wunderbaum, Palma Christi	180	15	25	5
Rosa hort.	Rose	Rosier	Rose	260	15	35	5
Saintpaulia ionantha H. Wendl.	African violet	Saintpaulia	Usambaraveilchen	260	15	25	5

Latine	English	Français	Deutsch	A	B	C	D
Solanum melongena L. var esculentum Nees	Egg-fruit	Aubergine	Eierfrucht, Aubergine	180	15	25	5
Solanum tuberosum L.	Potato	Pomme de terre	Kartoffel	260	20	43	8
Sorghum spp.	Grain sorghum, Fodder sorghum	Sorgho grain, Sorgho fourrager	Mohrenhirse (Korn- und Futter-)	260	15	35	5
Thea sinensis L.	Tea	Théier	Tee	260	18	25	8
Trifolium hybridum L.	Alsike clover	Trèfle hybride	Schwedenklee	260	15	25	5
Trifolium pratense L.	Red clover	Trèfle violet	Rotklee	260	15	25	5
Trifolium repens L.	White clover	Trèfle blanc	Weissklee	260	15	25	5
Trifolium resupinatum L.	Pin clover	Trèfle de Perse	Persischer Klee	260	15	25	5
Trifolium subterraneum L.	Subterranean clover	Trèfle souterrain	Bodenfrüchtiger Klee	260	15	25	5
Triticum turgidosecale	Triticale	Triticale	Triticale	260	15	43	5
Triticum spp.	Wheat	Blé	Weizen	345	15	43	5
Vigna unguiculata (L.) Walp.	Cowpea	Dolique de Chine	Catjangbohne, Spargelbohne, Augenbohne	260	15	35	5
Vitis spp.	Grape	Vigne	Rebe	345	20	43	8
Zea mays L.	Grain maize	Maïs	Mais	345	15	53	5
Zea mays L.	Sweet corn, popcorn	Maïs sucré, popcorn	Zuckermais, Popkorn	180	15	25	5

TABLE 2

FEES PAYABLE

No.	Purpose	Amount
1	Application for a plant breeder's right (reg. 4(2)(e))	R87 each
2	Priority claim for the grant of a plant breeder's right (reg. 5(2)(c))	R18 each
3	Objection to the grant of a plant breeder's right (reg. 5(2)(c))	R18 each
4	Furnishing of the results of tests and trials to the appropriate authority in a convention country or an agreement country (reg. 10(3))	R230 each
5	Application for a compulsory licence (reg. 15(1)(d))	R36 each
6	Notice of the transfer of a plant breeder's right (reg. 16(2)(b))	R18 each
7	Application for the alteration or supplementation of the denomination of a variety (reg. 17(1)(b))	R180 each
8	Objection to the alteration or supplementation of the denomination of a variety (reg. 17(3)(e))	R18 each
9	Objections to intended termination of a plant plant breeder's right (reg. 18(1)(f))	R36 each
10	Notice of the voluntary surrender of a plant breeder's right (reg. 19(1)(b)(i))	R36 each
11	Inspection of the register of plant breeders' rights (reg. 22(2)	R8.40 per occasion or certificate
12	Application to inspect documents pertaining to a plant breeder's right, or for a certificate by the registrar (reg. 23(2))	
13	Application for a copy of particulars in the register or of documents pertainif to a plant breeder's right (reg. 23(2))	R1.70 per page
14	Lodging of appeal against a decision or action taken by the registrar (reg. 24(1)(d))	R180 each

CASE LAW

United Kingdom: 'Moulin' Winter Wheat Variety Case

The Plant Varieties and Seeds Tribunal of the United Kingdom rendered on August 27, 1984, a decision in a case relating to homogeneity (uniformity). The decision is reproduced below in a somewhat abridged version. It is recalled that an earlier decision which related to distinctness--the 'Prego' Italian Ryegrass case--was published in UPOV Newsletter No. 5, on pages 8 to 15.

2. On 21st October 1983 the Ministry of Agriculture, Fisheries and Food (MAFF) and the Controller of Plant Varieties wrote to the Appellants, the Plant Breeding Institute (PBI) and the National Seed Development Organisation Limited (NSDO) stating that they proposed to refuse their applications dated 26th August 1981 respectively for the grant of plant breeders' rights and addition to the United Kingdom National List in respect of the winter wheat variety MOULIN on the grounds that the variety lacks uniformity.

3. Representations in writing against the proposed decisions were made, and the Ministry and the Controller confirmed their decisions to refuse the applications - the decisions to take effect on 13th April 1984 unless in the meantime, appeals were lodged to this Tribunal.

4. Appeals were in fact lodged on 11th April 1984 and these were heard together in Cambridge on July 9th - 11th 1984 inclusive, Mr. E.I. Walker-Arnott and Mr. Ratzke (Messrs Herbert Smith & Co. - Solicitors) appearing on behalf of the Applicants/Appelllants and Mr. G.R.J. Robertson (Solicitor for the MAFF) on behalf of the Authorities.

5. Very briefly the grounds in support of the appeals were stated to be that the Authorities had wrongly interpreted the results of the tests for uniformity referred to in the Report on Tests for DUS in respect of the variety MOULIN.

6. No criticism was levelled at the actual recorded results of the tests and there is, accordingly, no dispute about the figures.

7. Evidence of a very high quality was adduced by the Appellants in support of their contention that, on a proper interpretation of the test results, the variety MOULIN should be accorded a grant of rights and admission to the National List. Likewise the Authorities also adduced evidence of a very high quality in support of their decisions to refuse the applications. In particular the manner in which the tests (referred to as DUS tests) set up by the Authorities act as an effective screen for candidate material for the grant of rights and admission to the National List was vigorously defended.

8. These appeals are, accordingly, and in essence, a rehearing of the applications and involve a determination of the relevant issues based upon an appraisal of valuable and cogent evidence which was not available before the Authorities.

9. Rule 4 of Part II of Schedule 2 to the Plant Varieties and Seeds Act 1964 states that, in order to qualify for grant of rights, the variety must be sufficiently uniform or homogeneous having regard to the particular features of its sexual reproduction or vegetative propagation.

14. Regulation 11 of the Seeds (National Lists of Varieties) Regulations 1982 (the Lists Regulations) provides that in order for a variety to gain entry in a National List it must conform to the requirements (including the requirement of uniformity) set out in Schedule 2 and the responsibility for setting up the requisite tests and trials to ensure that a variety does so conform falls upon the Ministers.

15. In practice the uniformity tests set up in the case of MOULIN for the purpose of determining its eligibility both for the grant of rights and admission to the National List were the same.

16. Paragraph 2 of Schedule 2 of the Lists Regulations provides what, at first sight, appears to be a somewhat stricter requirement for uniformity than that contained in Schedule 2 of the 1964 Act relative to the grant of rights. The

requirement for Listing states that the plant variety shall be such that the plants of which it is composed are, apart from a very few aberrations and account being taken of the distinctive features of the reproductive system of the plants, similar or genetically identical as regards the characteristics, taken as a whole, which are considered by the Ministers for the purpose of determining whether the variety is uniform or not.

17. It would, in our view, be manifestly absurd if the difference in the precise wording of the uniformity requirements as between the Act and the 1982 Lists Regulations was to have the result that a particular variety could be accorded a grant of rights, but at the same time and on the basis of the same tests prescribed by the authorities, be refused National Listing.

18. Accordingly, we think that the Authorities were right, in the case of both MOULIN applications, to consider whether or not the variety possessed sufficient uniformity as the single relevant criterion and to take both applications in tandem and then to issue one decision or judgment.

19. The crucial question before us is whether, in determining that MOULIN lacked sufficient uniformity on the basis of the tests results, the Authorities were right, or whether in the light of the evidence adduced before us on these appeals--in particular the evidence directed to the interpretation of the test results and the particular features of the sexual reproduction of MOULIN--the variety is sufficiently uniform as to qualify for the grant of rights and admission to the National List.

20. It is to be noted that nowhere is uniformity specifically defined in the Act, although it clearly connotes some quality apart from distinctness and stability--the other two positive requirements set out in the Rules.

24. It was submitted by the Appellants that the requirement for uniformity imports an element of flexibility absent from the distinctness and stability requirements and that authority for this is to be found in the ZEPHYR case (1967 FSR 576).

25. The Controller in a careful analysis of the uniformity requirement in that case, which was heard before the National List Regulations became effective in the United Kingdom, has this to say at paragraphs 8 et seq. of the Decision.

> "8. In its ordinary and natural meaning the word "uniform" as applied to plant material does not connote complete uniformity. Experience shows that the uniformity of plant material comprising a variety differs according to the plant's mode of reproduction or propagation. The words in the Schedule "having regard to the particular features of its sexual reproduction or vegetative propagation" clearly recognise this and require such features to be taken into account in assessing the uniformity of a variety and particularly whether it is sufficiently uniform for the purposes of a grant of rights.
>
> "9. It may also be noted that the wording of the rule for uniformity ("sufficiently uniform") is significantly less precise and appears to make fewer demands on the breeder than either the rule for distinctness (a variety "must be clearly distinguishable by one or more important characteristics") or stability (a variety "must be stable in its essential characteristics that is to say, it must remain true to its description"). Although much may be required of a variety under the rules for distinctness and stability, the words "sufficiently uniform" do not appear to require the prescription of a standard of uniformity to satisfy which would require the breeder of a distinct and stable variety to attain a higher degree of uniformity for the purpose of a grant of plant breeders' rights than would otherwise be considered necessary or appropriate. Part I of the Act does not for example empower the imposition of a standard of uniformity which has for its object the improvement of seed quality--this is a matter for Part II of the Act. On the other hand, "sufficiently uniform" appears to imply a degree of uniformity no less than can be attained without excessive effort out of proportion to the improvement in uniformity gained by the removal of off-types. At the same time a degree of uniformity is implied which does not cast doubts on the ability of the variety to satisfy the distinctness and stability rules.

> 10. It is considered, therefore, that "sufficiently uniform" for the purpose of a grant of plant breeders' rights means the degree of uniformity a capable breeder skilled in the art can reasonably be expected to achieve having regard generally to the nature of plant material and more particularly to the biological possibilities of the species in which he is working including its mode of reproduction, and to any special features of the variety under consideration. The best test for this is to determine what breeders skilled in the art have achieved and are achieving in the particular species, and to make suitable allowance for any special difficulties arising in the case of particular varieties".

26. We agree with this statement as a matter of principle, and in our view neither the passage of time nor recent advances in breeding technology have eroded what seems to us a correct analysis, as there expressed, of the uniformity requirement--whether in the context of applications for plant breeders' rights or of applications for admission to the National List.

27. We derive support for this view from the wording of Schedule 2 of the Lists Regulations to the effect that account must be taken of the distinctive features of the reproductive system of the plants in determining whether they are similar or genetically identical as regards their characteristics taken as a whole.

28. Before stating how the DUS tests for MOULIN were set up by the Authorities for the 1981/2 (DUS 1) and 1982/3 (DUS 2) growing seasons, reference should be made to the Cereal Seeds Regulations 1980, which provide in Regulation 5(1) that no person shall (in the case of wheat) market any seeds unless they are seeds of varieties entered on the National List and seeds conforming to certain defined categories. In the case of wheat there are five relevant categories--breeders seeds, pre-basic seeds and basic seeds (all of which are required to have been produced by or under the responsibility of the maintainers) and the certified seeds of the first and second generations--that is to say, seeds produced directly from basic seeds or with the authority of the maintainer directly from pre-basic seeds (in the case of first generation certified seeds) or directly from first generation seeds (in the case of second generation certified seeds).

29. The importance of the certification system in the "real world" of commercialisation of wheat products (as the Appellants were at pains to emphasise) is that--as a matter of law--it is impossible to proceed beyond the fifth generation, and that within the regulated system of the five categories (or generations) there is a constant act of renewal--year by year--at the top by the maintainer of the seed passing through the generations. This, so it is claimed, ensures that the consumer is getting a product which is as close as possible to the purest line of seed.

30. The certification system as set out in the Cereal Seeds Regulations provides standards for ensuring varietal purity. These are given in Schedule 2, paragraph 5, as follows.

Basic Seed	(minimum standard)	99.9
Certified Seed	(1st generation)	99.7
Certified Seed	(2nd generation)	99.0

31. It is, of course, important to appreciate that the certification system stands apart from the DUS testing system provided for under the 1964 Act and the Lists Regulations--but in our overall assessment of MOULIN we are, we think, entitled to take into account the certification factor having regard to the importance of the role attaching to the maintainer (the skilled breeder) provided for both under the Act and the Lists Regulations. Thus where the evidence before us paints a broad canvas in respect of any particular variety we are, we think, entitled under the Act and the Lists Regulations to adopt a broad approach in relation to that variety in determining whether or not, under the law, there is sufficient uniformity to justify the grant of rights and admission to the National List.

32. MOULIN, so we were told by Mr. W.E.H. Fiddian, a highly experienced agricultural botanist and presently Group Agronomist for Miln Masters (a competitor of the Appellants), is a high quality wheat particularly suitable for bread making. It also has high disease-resistant qualities. A paper produced in 1983 by the National Institute of Agricultural Botany for its Cereal Trials

Advisory Committee shows that, in terms of yield, MOULIN stood considerably higher (7 %) than AVALON, the then best quality bread making wheat available on the Recommended List.

33. In order to retain the goodwill of the housewife (i.e. the bread purchasing public) it would still be necessary, so Mr. Fiddian explained, to import high quality wheat from Canada and to incorporate a certain percentage of that wheat together with MOULIN in the bread making process.

34. In the case of MOULIN tests were carried out by the Authorities over a two year period 1981/2-DUS 1 and 1982/3-DUS 2. These periods are provided for in procedures following consultation between the Authorities and the breeders' organisations.

35. The technical work was shared between tests centres situated in Cambridge, Edinburgh and Belfast.

36. In the case of DUS 1, 500 ears were submitted and the procedures then applicable stated that for the purpose of assessing uniformity there should be no more than 6 variant rows in 300 in one year.

37. 300 ear-rows were grown, (100 on each centre) but in fact 50 rows were lost in Belfast due to a growing failure--not to be confused with a variety failure--so that a total of 250 ear-rows were grown for tests in DUS 1.

38. Between DUS 1 and DUS 2 the procedures were altered. Applicants were henceforth only required to submit 275 ears. The technical work was to be shared as before between Cambridge, Edinburgh and Belfast.

39. A proportion of the submitted wheat would be retained after the completion of the tests to represent the variety--i.e. the definitive stock.

40. The altered procedures laid down that at each test centre an ear-row bed should be sown from 50 submitted ears and that a drilled plot of approximately 40 m of row should be sown from the submitted seed (6 kg).

41. No fresh submission was required for Year 2; it was for the Authorities at each centre to sow an ear-row bed from 50 ears harvested from a year 1 drilled plot and/or spaced seed bed (not applicable here) and to sow a drilled plot from seed retained from the Year 1 submission. It was seed harvested from this plot which forms the basis of MOULIN ear-rows in Year 2.

42. Under the altered procedures in the assessment of uniformity of wheat there should be no more than four variant rows in 150 in any one year and not more than six in 300 over 2 years.

43. Mr. Walker-Arnott, for the Appellants, argued strongly that, inasmuch as the skilled breeder was effectively excluded from taking any part in DUS 2 testing, this was bound to have a distortive effect in the "real world" (as he put it) of maintenance of varietal purity since the annual regeneration of varietal purity--the normal responsibility of the skilled breeder or maintainer --would be wholly absent.

44. In fact MOULIN passed the DUS 1 tests without difficulty, the trouble only arose following the results of DUS 2 when the Appellants had 150 rows under test. These results showed 6 variant rows - an excess over the 4 variant rows in 150 permitted in any one year (whether year 1 or year 2).

45. It was by reason of this excess that the Authorities decided that MOULIN lacked sufficient uniformity and so rejected the applications for plant breeders' rights and admission to the National Lists.

46. The Appellants base their case mainly on two propositions:

1. They claim that if the breeders' techniques of annual regeneration of varietal purity had been applied in the present case, the number of variant rows would not have been in excess of the permitted standard.

2. Further, they claim that a proper categorisation of the revealed variants demonstrates that their character was not such as to justify refusal of the applications. The Authorities were, accordingly, in error in their interpretation of the test results.

48. The evidence adduced by the Authorities was directed mainly to the propositions:

1. that the DUS tests were in accordance with EEC and UPOV standards,
2. that such tests had to be applied universally and consistently in relation to all manner of breeders (this being the only possible method of orderly administration of procedures relating to the grant of plant breeders' rights and admission to the National Lists) and
3. that in the case of MOULIN the test results showed an excess of variants over and above the permitted standards.

49. Mr. Walker-Arnott at one stage in his argument claimed that the Authorities' procedures were, in comparison with the "real world" of wheat breeding, "ossified".

50. We find this epithet unsustainable and inappropriate. The Authorities unquestionably have a difficult task in assessing standards in an environment where technical advances in the determination of variant categories are constantly being made--particularly by influential and large scale breeders. They have (in consultation with the breeders' organisations) to set up a testing structure which can be seen to provide fairness and parity to all candidates, and they are obliged at the same time to act consistently with the European authorities--provided only that where United Kingdom practices are shown to be in advance of those operating in Europe the United Kingdom authorities can reasonably expect the European authorities on their part to act consistently with United Kingdom practices.

51. In the present case, the single issue before us is whether, in the light of all the evidence adduced, the wheat variety MOULIN is sufficiently uniform to justify the grant of rights and admission to the National List.

52. Our decision upon this single issue must be made in accordance with United Kingdom law. If we come to the view that, in all the circumstances, a grant of rights and admission to the List is justified--this must in no way be interpreted as a criticism of the general structure of existing DUS test procedures.

53. Whether or not DUS test procedures in any given and/or particular situation match up to the up-to-date technology available for assessing variant categories, if such are considered relevant, must be a matter for the Authorities following consultation with the breeders.

54. We recognise that there may be difficulties in this regard (e.g. economic structures, shortage of skilled personnel, etc.)--but that is not within our remit.

55. Our remit is to administer the law and determine the issue before us on these appeals.

56. The final report, on which the Authorities' decision to reject the applications was based shows that in the 1982 harvest year (DUS 1) 7 variant single taller plants were recorded in Cambridge and 3 single taller plants in Edinburgh.

57. Under the relevant rules these do not constitute mixed rows. Accordingly, the variety went forward to year 2. However, in the 1983 harvest year (DUS 2) there were recorded, in respect of ear-rows planted by the Authorities ex 1982 plots, two mixed rows (Belfast), two variant rows (Cambridge) and two variant rows (Edinburgh) described as mixed in the first and second descriptions.

58. In addition, a total of 35 rows with one or more single variant plants were recorded.

59. The Report summarised these findings as follows (for DUS 2): "the number of variant ear-rows reported is in excess of the standard for uniformity. In addition, the number of rows with single variant plants (35 rows in 150 with one or more single plants) is considered to indicate an above-average proclivity to out-pollination and, together with the number of mixed rows, a potential lack of stability.

60. On the basis of this information the Authorities formally concluded that the variety is considered to lack sufficient uniformity.

61. The Judgment at paragraph 7 states:

> "Apart from certain types of identifiable (visible) mutant plants which are discounted (i.e. speltoids and bearded/non-bearded mutants, compactoids, non-glaucous mutants) the origin of variants cannot readily be determined with certainty and is not considered relevant to the application of current procedures".

62. This passage was strongly challenged by the Appellants who adduced technical evidence in support of the proposition that variants can be categorised into three categories, and that the origin of five of the six variant rows mentioned in the Report can be so categorised and that such must be relevant to the questions which the test procedures are designed to answer.

63. Mr. John Bingham, Leader of the Wheat Breeding Team of the PBI, a Fellow of the Royal Society and responsible for the breeding of MOULIN, gave evidence about the wheat breeding process generally and the problems which have to be overcome.

64. He told us that the initial cross for MOULIN was made from MARIS WIDGEON, bred at the PBI and a line which came from CIMMYT in Mexico, both of which had good milling and bread making qualities. A further cross was made with a HOBBIT, another PBI variety, in 1973. He stated that the stock of MOULIN, the subject of the DUS tests, was based on a single F8 plant. Before the present applications, two previous applications had been made. The first in 1979. This was withdrawn. The second, made in 1980, was refused. In Mr. Bingham's view the main problem was out-pollination.

65. Mr. Bingham went on to explain how variants can be categorised into three categories:

Category 1 - segregants from the original cross

Category 2 - resulting from natural crosses occuring by chance between the variety concerned and other varieties

Category 3 - spontaneous mutants, aneuploids and their segregrants

66. The majority of variants in the second application were category 2 out-pollinations, although one--the subject of a chromosome test--proved to be a category 3 aneuploid.

67. The particular tendency of MOULIN to out-pollinate was not, however, confirmed until 1983 following a visit to the DUS plots in Belfast.

68. In answer to a question about the nature of this out-crossing, Mr. Bingham stated that MOULIN is a variety in which the anthers tend to be exerted from the floret.

69. Further points made by Mr. Bingham, which were not really challenged on cross-examination, were as follows:

1. In answer to a passage in the Judment at paragraph 9 which stated that the difference in incidence of variants between 1982 and 1983 might more correctly be interpreted as resulting from a stock difference between the submitted ears and the submitted seed, Mr. Bingham was most emphatic that there was no such difference--both having been derived from a single plant progeny.

2. In reference to the three categories of variants already mentioned:

   Category 1 is a variation which a breeder might be expected to eliminate in the normal course of production of a variety. It naturally diminishes by approximately half of the remaining segregation in every generation of selfing.

   Category 2, the out-pollination category, is characterised by a mixture of wide variation. To reduce the chances of out-pollination the breeder can either isolate the variety from other varieties which might act as the male pollen or grow the stock within a barrier of the same variety - i.e. with a pollen cloud from the same variety.

   Category 3 variants, for the purposes of the present case, can be subdivided into two kinds--the first involving a change in or loss of a single gene, and the second involving aneuploids characterised by the loss of one or more 5A chromosomes. The best known is the

speltoid. Another involves the loss of a semi-dwarfing gene 4D, and the plants are therefore slightly taller. Aneuploids are found continually and can be identified by chromosome tests.

3. As regards a document entitled "Review of Cereals DUS Procedures - BAPB view - 17th January 1983" in the preparation of which Mr. Bingham had a part, Mr. Bingham fully endorsed paragraph 3 headed "Breeders' stock production and maintenance system" and then went on to contrast this with DUS Procedures, which in his view were not akin with what is done in the real world of maintenance breeding.

4. Out-pollination is more likely to occur in DUS plots because there would be many other varieties growing nearby. PBI procedures would involve "roguing out" or discarding off-types, but this does not feature in DUS procedures, where in DUS 2 there is no fresh submission from the Applicants. Accordingly, in Mr. Bingham's view the Authorities' practice of growing on from the first year to the second year is unjustified.

5. Notwithstanding the proclivity of MOULIN to out-pollinate, that problem has now been solved by the PBI roguing out--this being the standard practice of breeders to counter the problem. When the final report states that in the 1983 harvest year a total of 35 rows with one or more single variant plants were recorded, in Mr. Bingham's view the great majority of them had been due to out-pollination, and that would have occurred in the DUS 1 seed bed.

6. In the context of farm scale production where seed 2 was being produced from seed 1, no special precautions would be required for MOULIN from adjacent varieties in the same or adjoining fields because the variety would be operating with such a big cloud of its own pollen.

70. Sir Ralph Riley, Secretary and Deputy Chairman of the Agricultural and Food Research Council since 1978 and from 1952 - 1971 Head of the Cytogenetics Department at the PBI Cambridge, confirmed that the categorisation of variants set out in the Appellants' written representations to the Authorities dated 14th December 1983 is accurate from a scientific point of view. He went on to elaborate on the characteristics of each category broadly underlining the evidence already given by Mr. Bingham. In particular, in reference to category 2, he stated that this could well occur when the flower gaped open and so be affected by other plants growing in the vicinity.

71. In particular, he explained the chromosome anomalies of aneuploids the most common of which was the occurrence of monosomie--akin to the occurrence of Down's Syndrome in the human species--and concluded that the level of chromosomal anomaly is greater in the earlier generations than in the later generations when, in the normal way, there is a higher degree of genetic stability.

72. As regards the weight to be attached to these categories in determining the question of "sufficient uniformity", Sir Ralph expressed the view that much more attention should be paid to category 1 variants than to category 2 and category 3 variants. Category 2 will only affect the recognition of the variety as a stable or non-stable entity in terms of the conditions under which the seed stock is produced. Normally this should not be a consequence except in the rather abnormal conditions where very small quantities of material are grown in conditions where the seed stock is exposed to a large number of other genetic variants. Category 3 ought almost to be set aside totally because its variants are going to be there anyway.

73. In his view those responsible for running the DUS system should understand the origins of the variants that they detect sot that they can weigh the problem they are going to cause.

74. If, in the case of the six variants featured in the final report on MOULIN, two were found to fall within the aneuploidal category--then these two should be given low weighting and, if set aside, MOULIN would fall within the level of purity required by the DUS regulations. In his view, the rules are arbitrary and such arbitrariness may not be correct.

75. Dr. C.N. Law, Head of the Cytogenetics Department at the PBI, described the technique of chromosome counting, and in reference to MOULIN and the six variant rows found in the 1983 harvest year, stated that he had conducted chromosome counting tests on the seed from plants in those rows, and obtained the following results:

Belfast (Row 39) - Several plants were aneuploid.
Edinburgh (2 rows) - All normal - no variation. These rows could not, accordingly, be ascribable to aneuploidy.
Cambridge (2 rows) - Distinct Aneuploids - recognisable in segregant plants of the row. As easy to tell as a laxed speltoid which is allowed for and can be ignored.

76. This evidence was not challenged by Mr. Robertson.

77. Dr. P.I. Payne is the Leader of the Protein Quality Research Laboratory of the PBI. He described in detail the process of electrophoresis and its application in the determination of the protein of wheat grain.

78. He conducted electrophoretic tests on four out of the six variant rows in the final report on MOULIN.

79. Belfast (Row 38) showed several bands in the banding patterns which come from a different varietal source. Similar results were observable in the case of Edinburgh (Rows 1 and 8). The overwhelming conclusion in Dr. Payne's view is that these bands have arisen as a result of out-pollination occurring at a fairly recent generation.

80. Electrophoretic tests were also conducted in relation to some of the 35 variant single plants mentioned in the Report. Again those disclosed the existence of alien bands due to out-crossing.

81. Electrophoretic tests on MOULIN certification stock M 16 grown by NSDO for 1983 certification, however, showed all the banding patterns to be identical. None of the aberrant bands revealed in connection with the material from the three DUS testing stations were present in the NSDO 1983 certification material.

82. In cross-examination, Dr. Payne stated that electrophoresis was not normal standard procedure in European DUS testing, but went on to state that it is normal procedure for e.g. checking imported French wheat. He also stated that it was straightforward, mentioning that the procedure had been mastered after two weeks by a 17 year old person in his laboratory.

83. Mr. R.H. Newman's evidence related to the certification procedure and in particular to the certification tests applied to MOULIN in 1983 in accordance with the Cereal Seeds Regulations. Mr. Newman is Head of the Cereals Section of the NSDO. Briefly there are two forms of control--the verification test and the Ministry inspection to ensure that the crops meet technical criteria. Both forms of control were excercised in the case of MOULIN. The outcome was that MOULIN met the requirements for the production of pre-basic seeds so far as varietal purity was concerned-i.e. 99.9 per cent.

84. The fact that the final report dated 4th November 1983 recorded rejection was due to the fact that MOULIN failed the DUS test carried out by the Authorities in that same year. The variety did not fail for technical reasons of the certification scheme itself.

85. This is important for it shows that when breeders' maintenance procedures are operative the varietal purity is sustained. The DUS tests on the other hand did not have the advantage of the operation of any kind of maintenance regime. Accordingly, the particular DUS system operative in the present case would seem to us, on the basis of the Appellants' evidence, not to correspond with the real life conditions in the field. For the purpose of sustaining varietal purity maintenance is, therefore, of vital importance in the case of MOULIN. This feature, however, is recognised both in the Act and the Lists Regulations and may be taken into account in law in deciding whether the variety is sufficiently uniform as to qualify for the grant of rights and admission to the National List.

86. Dr. R.C.F. Macer, Secretary of BAPB, gave evidence principally directed to the correspondence relating to the process of consultation continuously taking place between the Authorities and the breeders. While not directly relevant to the issue under appeal it does show two things.

1. That the Association was surprised and disturbed to note the major change of the reduction of ear-rows (in DUS test procedures) from 300 to 150.
   The present size is one that is prone to difficulty.
2. The Association was concerned at the presence of off-types, which might be attributed to out-pollination resulting in apparently high numbers of mixed rows in NL 2 (i.e. DUS 2).

87. As to the point that variants should be categorised: there appears to be no firm consensus on this as between the Authorities and the breeders. Dr. Macer, in cross-examination by Mr. Robertson, stated that there is no specific identification of categories 1, 2 and 3. But discussions and correspondence about this have clearly taken place.

88. It is not within our remit to suggest how or in what manner DUS tests should be structured and/or improved. Clearly the consultative process must and will go on. But we think it is significant that so much of the Appellants' evidence in the present case has been directed to categorisation--and this, we feel, is a factor to which we must have regard in determining the issue of uniformity particularly in the light of the wording of the uniformity test in the Act "... having regard to the particular features of its sexual reproduction or vegetative propagation".

89. The Appellants' evidence directed to the point that the proclivity of MOULIN to out-pollinate would be artificially enhanced in the particular environment of the DUS plot structure, whereas in the commercial environment this would be countered by the normal maintenance procedure of discarding (i.e. roguing out) off-types, is, in our view, relevant, in the light of what was stated in the Zephyr decision at paragraph 10.

90. It is worth recording what Mr. Bingham stated in his evidence; "If you go back to the small plots you would come back to the original problem again".

91. Now none of this evidence was effectively challenged by the Authorities in their evidence.

92. Mr. J.L. Keppie, Principal Scientific Officer in charge of the Cereals Section within the Plant Varieties and Seeds Division of the Department of Agriculture and Fisheries for Scotland, stated that he has been involved in cereal DUS procedure since it began in 1964 and was, further, responsible--following consultation with the BAPB--for the production of the latest version of the cereal procedural document.

93. Mr. Keppie emphasised the importance of the definitive stock in DUS test procedures, and stated that over the past 20 years the authorities have examined something of the order of 550 wheat varieties of which approximately two-thirds had met the test standards. This definitive stock was the stock submitted by the Applicant as representing the variety and for which the Applicant was wholly responsible. He confirmed that the standards as set out in the relevant DUS procedural documents were applied in the case of the MOULIN applications and that the results showed an unacceptably high number of variant rows.

94. While agreeing with the Appellants' findings as to the probable origin of the variant rows, Mr. Keppie was adamant that it was not practicable to determine origin by means of chromosome counts and electrophoretic tests, since these would have to be applied across the board to all varieties under test and would be costly in terms of manpower and expense. Accordingly, there was no obligation on the part of the Authorities to determine the origin of the deviant rows in the case of MOULIN. In cross-examination he disagreed with Sir Ralph Riley that it is appropriate for the purpose of DUS tests to weigh the categories differently, and in reference of sampling procedures, appeared to accept that 100 ear-rows per testing centre affords a better sample than 50 rows per centre, and that the overall reduction from 300 to 150 was made for financial reasons.

95. At the same time he maintained that the reduction from two seed submissions to one was decided upon in order to determine more effectively the uniformity of what was to be the definitive stock and thus eliminate a source of potential abuse of the DUS system whereby tests could be continued into third and fourth years.

96. A particularly significant section of Mr. Keppie's evidence, reflected by certain other of the Authorities' witnesses, confirmed the omission in DUS testing of any of the maintenance practices normally carried out by breeders in the commercial world. Again Mr. Keppie agreed that, in selecting from DUS plots at random, a single variant plant might be taken for the purpose of growing on the ear-rows in DUS 2 and that a mixed row might result thereafter.

97. This evidence strongly suggests that DUS tests procedures on wheat varieties are markedly out of line with the reality of commercial procedures, and that on occasions these may operate unfairly against an applicant in circumstances where the particular features of the sexual reproduction of the variety happen to be somewhat unusual. While the adoption of common procedures must inevitably form the basis of any sound system of DUS testing as a matter of practical administration, there must be individual cases where further in-depth examination is justified for the purpose of determining sufficiency of uniformity. Such cases may not be easy to detect, but where they do exist it would clearly be unsatisfactory for them to be rejected by reason only of the absence of further individual examination. The Zephyr decision would seem to bear this out.

98. Dr. H.D. Patterson, a statistical expert employed by the Agricultural and Food Research Council in the Unit of Statistics gave us an account of some of the statistical factors bearing on the former and current DUS procedures. Before the change the test was 6 variant rows in 300 in one year (i.e. each of two years). Afterwards it was 4 in 150 in any one year. Dr. Patterson maintained that this change in itself gave applicant varieties a better chance of meeting the Authorities' requirements, and that this applied in the case of MOULIN, which failed in the second year testing.

99. Dr. Patterson did not regard MOULIN as a marginal failure, but he conceded that this was purely a mathematical computation and this took no account of the agricultural importance of any variants revealed by the tests (i.e. their origin and/or character).

100. When asked in cross-examination whether he recognised that the first year of testing, in terms of the origin of the ear-rows, the variants in which he is computing, is different from the second year of testing, he gave an emphatic Yes. To accomodate this factor in a statistical structure for the assessment of the uniformity standard could be done. It would be an entirely new exercise.

101. Dr. Patterson's evidence, taken as a whole, seemed to us to disclose a certain rigidity in the DUS test procedures again somewhat out of line with the realities in the field.

102. Mr. R.D. Seaton, a senior officer of the Department of Agriculture and Fisheries for Scotland and responsible for all work carried on within the Department relating to seeds and plant varieties in connection with the National List and Plant Breeders' Rights system, gave a spirited defence of DUS procedures in the course of his evidence.

103. Referring to various EEC directives and UPOV guidelines he maintained that the Authorities in this country cannot act in isolation when administering the law relating to plant varieties. "We have to keep in step with what happens in Europe and internationally" is how he put it.

104. Now as a matter of law it must be stated that this Tribunal is only empowered to administer the law of this country, and unless we are told that any specific provisions operating in Europe, or internationally, have by statute or otherwise been incorporated in the law of this country we cannot be bound thereby. We were told that the United Kingdom Authorities have come in for considerable criticism from other countries, (particularly within the EEC) for "being too liberal", with the result that breeders are encouraged to make applications for registration with the United Kingdom first as a means of gaining entry on the common catalogue of plant varieties within the EEC. Once they achieve registration on the common catalogue, which is normally automatic after two years registration within a member country, those varieties are freely marketable throughout the Common Market.

105. Such considerations are not for us to take into account in determining the issues before us on these Appeals. The sole issue before us is whether MOULIN is sufficiently uniform for the purposes of an award of grant of rights

and admission to the United Kingdom National List and our decision on that issue has to be made under United Kingdom law and in accordance with United Kingdom practice.

106. It is perharps worth mentioning, however, that the wording of the uniformity rule in the United Kingdom National List Regulations is identical to the wording of Article 5 paragraph 3 of the EEC Council Directive of 29th September 1970.

107. Now it was further stated that none of the authorities of the EEC and UPOV member countries categorise variants in the manner which has been described during the course of the evidence adduced on these appeals, and that to do so in United Kingdom would render this country seriously out of line with other countries. We cannot accept this as a tenable argument in law. If categorisation provides the means whereby the uniformity issue may be more fairly and effectively determined in any particular case then it is our duty to say so. So far as this case is concerned, the Appellants have clearly put forward very powerful and cogent evidence in support of categorisation, and this has not been effectively countered by the Authorities--save on the grounds that the present system involves a saving in labour and costs.

108. We fully sympathise with Mr. Seaton in his difficulties with EEC and UPOV authorities and in similar vein he sought to persuade us that the Zephyr decision ought to be re-appraised in the light of developments which have taken place since that case was decided. He mentioned the Prego case, but that was concerned with distinctness, which is not here in issue.

109. We think that Mr. Seaton gave his evidence with great force and integrity, and for that he cannot be criticised--but at the end of the day it all comes back to the simple issue. And that, too, involves taking into account all means available to the present generation of scientists and genetic experts to assess the sexual and propagative performance of advanced wheat varieties. We cannot be blind to scientific progress.

110. Dr. J.K. Doodson, Deputy Director of the National Institute of Agricultural Botany and head of the crop division responsible for the National List testing in England and Wales, strongly supported Mr. Seaton in defence of current DUS procedures. In particular, he gave us a clear and graphic account of what is meant by "random sampling". He confirmed that MOULIN was recommended for refusal by the DUS group because of the 6 variant rows. In the course of his evidence, Dr. Doodson paid generous tribute to acknowledged men of experience in the field of wheat genetics, to BAPB and in particular to Mr. John Bingham and Sir Ralph Riley, from which it is clear that a very close and cordial relationship exists between the Authorities on the one hand and breeders on the other. Moreover, it is clear that this is an ongoing process. We take the view that the uniformity issue (which Dr. Doodson states is predominant in applications concerning wheat varieties) should rightly be determined with the benefit of all available technology, and that if this enables variants to be properly identified in accordance with categories to which appropriate weighting can be attached then this must be taken into account in the testing process.

111. We do not attempt to go into further detail--this must be a matter for discussion and consultation between the Authorities, the breeders and other relevant authorities.

112. We fully accept that the Authorities are in the business to test and not to breed varieties. This was a distinction which Dr. Doodson made abundantly clear in his evidence when he added that the Authorities made no attempt to rogue out impurities. Furthermore, he stated that it is no part of national listing for the results of certification or other extrinsic information to be taken into account.

113. The difficulty seems to be to accomodate a variety, which--like MOULIN--has a proclivity to out-pollination within current test procedures. Out-pollination can occur at the Authorities' testing stations and this is acknowledged. Moreover, varieties are grown close together. This is deliberate policy and no attempt whatsoever is made to isolate them.

114. It seems to us probable, bearing in mind Mr. Bingham's evidence in particular, that MOULIN fell a victim to these somewhat arbitrary techniques, and we have in mind what Sir Ralph Riley had to say about this and the likely causes of out-pollination.

115. Professor J.P. Cooper, the last of the Authorities's scientific witnesses and from 1975 until December 1983 Director of the Welsh Plant Breeding Station at Aberystwyth, again defended current DUS procedures but was careful to add that these procedures and standards may well be modified and improved. They are not immutable. Like the other witnesses he laid great stress on the importance of the definitive sample in the administrative process. He stated that on the DUS 2 material the DUS 2 ear-rows are derived by random selection from within the bulk seed. In other words they represent a progeny base of the submitted seeds, i.e. the progeny base of the definitive sample. He reiterated that it was for the breeder to ensure that the definitive stock reaches the required standard.

116. We too accept the importance of the definitive sample, but the primary concern here must be to ensure that a variety which is sufficiently uniform within the meaning of the law achieves a grant of rights and admission to the National List. The question of what constitutes the definitive stock in any given circumstances must be an administrative matter dependent upon the primary legal issue.

117. Mr. Frank Goodwin, the Controller of Plant Varieties and Seeds, confirmed that rejection of the MOULIN applications was the result of unanimous advice received from all the relevant testing authorities.

118. Reverting to the Judgment the crux of the Appellants' case centres upon their challenge to the veracity of paragraph 7 where it is stated: "Apart from certain types of identifiable mutant plants which are discounted the origin of variants cannot readily be determined with certainty and is not considered relevant to the application of current procedures".

119. Having considered the evidence adduced on these appeals very carefully and in great detail we cannot agree with this statement.

120. As regards the final report MOULIN was rejected because 6 variant rows showed up on DUS test results.

121. The Appellants maintained that there was a critical distinction between DUS 1 and DUS 2, and that DUS 2 was an unusual year totally unrepresentative of the normal system of maintenance breeding. We accept this.

122. Furthermore, they contend on the authority of the evidence given by Mr. Bingham, the breeders, and two acknowledged experts in their respective fields--Dr. Law on chromosome counting and Dr. Payne on the electrophoretic tests--that, on a true interpretation of the test results, three of the rows--one in Belfast and two in Edinburgh--were out-pollinations having no significance to the user and which ought to be discarded.

123. The two rows in Cambridge which consisted of wheat plants with later ear emergence were definitely stated to be aneuploids. In the view of Sir Ralph Riley these should have been discarded completely, such is the spontaneity and naturalness of aneuploids. The Appellants however merely contended that these should have been given much less weight than in the Report.

124. As to the 35 single variant plants in year 2 mentioned in the Report, Mr. Bingham maintained that these resulted from out-pollination in the DUS 1 seed bed--and, because these are not operated in the manner in which a maintenance breeder would operate, are not in truth representative of commercial reality.

125. In our view the above scientific analysis of the 6 variant rows in issue is well founded, and we see no reason why this should not be accepted.

126. In the light of the Zephyr decision and taking into account the evidence adduced on these appeals by both sides we are of the unanimous view that this variety meets the requirements of the Act and the Lists Regulations.

127. Accordingly, these appeals are allowed and we direct that the winter wheat variety MOULIN be awarded a grant of Plant Breeders' Rights and admission to a National List.

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Published by ASSINSEL, Chemin du Reposoir 5-7, 1260 Nyon, Switzerland, 24 pp., 29.7 cm.

CSTA (Canadian Seed Trade Association)

Seeds for a Hungry World - The Role and Rights of Modern Plant Breeders
Published by CSTA, 2948 baseline Road, (207), Ottawa, Ontario K2H 8T5, Canada, 93pp., 22.7cm.

LESSER (William H.) and MASSON (Robert T.)

An Economic Analysis of the Plant Variety Protection Act
Published by the American Seed Trade Association, 1030 15th Street, N.W., Suite 964, Washington, D.C. 20005, United States of America, 1983, 127 pp., 22.7cm.

The above three publications have the common feature of giving clear and convincing replies to the criticism levelled by a restricted but zealous group of activists against plant variety protection, the plant breeding and seed trade, and the present setup of genetic resources activities. They are all three remarkable by their wealth of information and the contrast which they create between the plain facts, those very facts that are frequently overlooked because of their straightforward simplicity, and the intricacies of the argumentation needed to support the criticism. We read for example: "In France, plant breeders' royalties cost the farmer 14.65 French francs for each hectare of cereal crop; the return is 350 francs" (ASSINSEL, French version). "Where opposition to PBR exists, the concern centers on the possibility that a few multinational firms might gain monopoly control of the plant breeding industry and unduly raise the price of seed and/or produce varieties requiring the use of excessive amounts of chemical fertilizers and pesticides. An effective check on both these possibilities is the farmer's right and capability to grow his own seed. In addition, public agricultural research stations and university research centers will continue to dominate genetic innovation in plants whether or not private establishments conduct the time consuming and intricate task of developing specific varieties. A further check on unreasonable pricing or restriction of supplies is contained in all Plant Breeders' Rights legislation which allows the national government to invoke compulsory licensing if a protected variety is not being handled properly" (CSTA). "Linking (tying) sales to seeds is profitable only if the seed (the tying good) is far superior to competing varieties. With seed, there are generally a number of close substitute varieties, so tying is infeasible" (Lesser and Masson).

[The editor]

BYRNE (Noel J.)

Plants, Animals, and Industrial Patents
in: International Review of Industrial Property and Copyright Law, Vol. 16, No. 1/1985, pp. 1-18

Periodicals

Diversity
Published by the Laboratory for Information Science in Agriculture, 419 Canyon, Suite 320, Fort Collins, CO 80521, United States of America.

According to the editors, this is a news journal for the plant genetic resources community. This is an understatement, however, for the journal contains many items of information of interest to the plant breeding community at large, in fact the users of plant genetic resources. Those items cover also issues directly related to plant breeding at the technical level, in particular plant biotechnology, at the legal level, in particular plant variety protection, and at the policy level. Although the journal concentrates on issues of relevance to the United States of America, it undoubtedly is also of interest to breeders in other countries.

[The editor]

CALENDAR

UPOV Meetings

October 14	Consultative Committee
October 15 and 16	Meeting with International Organisations
October 17 and 18	Council
November 12 and 13	Technical Committee
November 14 and 15	Administrative and Legal Committee

Symposia

August 12 to 16 Wageningen (Netherlands)	International Symposium on the Taxonomy of Cultivated Plants

1986

February 17 to 20 Lincoln (New Zealand)	Department of Scientific and Industrial Research (DISR) Plant Breeding Symposium

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