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| International Union for the Protection of New Varieties of Plants |  |

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| Technical Working Party for Fruit CropsFifty-Fourth SessionNîmes, France, July 3 to 7, 2023 | TWF/54/3Original: EnglishDate: July 20, 2023 |

Reports on Developments in Plant Variety Protection from Members and Observers

Document prepared by the Office of the Union

Disclaimer: this document does not represent UPOV policies or guidance

 The Technical Committee (TC), at its forty-seventh session, held in Geneva from April 4 to 6, 2011, agreed to request the Office of the Union to invite experts to submit written reports to the Office of the Union in advance of the Technical Working Party (TWP) sessions in order that a document containing those reports could be prepared by the Office of the Union. The TC noted that TWP experts would be invited to make a brief oral summary of their written report at the session and would also be encouraged to make reports under the agenda item “Experiences with new types and species”, as appropriate. The TC also noted that TWP experts would have an opportunity to raise questions concerning matters of interest (see document TC/47/26 “Report on the Conclusions”, paragraphs 9 and 10).

 Written reports were invited by the Office of the Union in Circular E-23/080 of April 26, 2023. The following reports were received (in alphabetical order):

* Members of the Union: Annexes I to X: Australia, China, European Union, France, Germany, Japan, Kyrgyzstan, Netherlands, New Zealand and South Africa

 The reports from Australia, China and France include content presented during the fifty-fourth session of the TWF.

[Annexes follow]

AUSTRALIA

*[Please see the PDF version]*

[Annex II follows]

CHINA

*[Please see the PDF version]*

[Annex III follows]

EUROPEAN UNION

## Statistics

Community Plant Variety Protection Office of the European Union (CPVO) applications decreased slightly but remained strong in 2022, with 3193 applications in total. The processing of more than 78 000 applications since 1995 underlines the stability of the system.

The distribution between crop sectors was as follows:

* Ornamental, 1265 applications (40%),
* Agricultural, 1 002 applications (31%),
* Vegetable, 664 applications (21%),
* Fruit 262 applications (8%).

In 2022, the CPVO Office granted 2964 titles for Community protection; 30 562 titles were in force by the end of the year. National authorities from all over the world regularly base their decisions on applications for CPVRs on technical examinations carried out on behalf of the CPVO (international cooperation, takeover of reports). In 2022, the CPVO provided 550 technical reports to 39 countries, the five countries from which most requests emanated were United Kingdom, Colombia, Morocco, Australia and Kenya.

## Administrative Council (AC)

The CPVO is supervised by an Administrative Council (AC) comprising representatives of the Member States and the European Commission and their alternates. In 2022, the members of the AC adopted the following:

- Intellectual Property Action Plan/SMEs: EU SME fund – a new scheme of financial vouchers to support SMEs in filing applications for EU Plant Variety Rights; extension to PVR application fee in 2023, the half of the application fee can be reimbursed (more information on: [SME Fund for community plant variety - How to apply | CPVO (europa.eu)](https://cpvo.europa.eu/en/news-and-events/news/sme-fund-community-plant-variety-how-apply)

- Fees regulation update launched in December 2022, expected to enter into force in 07/2023.

- Revision of Entrustment requirements document adopted with entry into force from 01/01/2023.

- Strategic Plan 2022-2026, strategic goals – operational excellence, developing the PVR value chain and fit for purpose legal and policy framework.

## Administrative Council decisions on technical protocols

In the course of 2022, the following technical protocols were adopted by the AC:

* *Lactuca sativa L.*  CPVO-TP/013/6-Rev.3
* *Chrysanthemum* L. CPVO-TP/026/2-Rev
* *Spinacea oleracea* L. CPVO/TP-055/5-Rev.4
* *X Triticosecale* Witt. CPVO/TP-121/3-Corr
* *Secale cereale* L. CPVO-TP/058/1-Rev-Corr
* *Hippophae rhamnoides* L. CPVO-TP/240/2
* Diplotaxis tenuifolia CPVO-TP/244/1-Rev.2
* *Foeniculum vulgare* Mill. CPVO-TP/183/2
* *Eruca sativa* Mill CPVO-TP/245/1-Rev.2-Corr.
* *Cannabis sativa* L. CPVO-TP/276/2-Rev
* *Echinacea* Moench CPVO-TP/281/2
* *Lagerstroemia* L. CPVO-TP/095/1
* *Eustoma exaltatum* (L). CPVO-TP/197/2

## Legal developments and Regulations

A study about "the economic contribution of PVR system in the EU" has been launched in 2021 and published in April 2022. It involves the CPVO, EUIPO, the European Commission and breeder's associations. The study considers the potential for the PVR system to help meet the Commission's Green Deal objectives and the United Nations (UN) Sustainable Development Goals.

## International affairs

The CPVO participated in several IP Key international outreach activities

### IP Key China

- Closed webinar Chinese Seed Law: videos of the activity available on the [IPKey China website](https://ipkey.eu/en/china/activities/plant-variety-protection-awareness-raising-seminar);

### IPKey Latin America and AL INVEST PI: new phase in 2022-2023.

- Study on the PVR legislation of Ecuador presented to Ministries in Ecuador during a seminar in May 2022

- October 2022 together with the project AL INVEST PI, IPKey Latin America: webinar (with more than 400 participants) on licensing of plant variety rights, partially relying on the content developed for the learning course on licensing plant varieties (“Laboratorio de Contratos de Licencias de Variedades Vegetales”).

- November 2022: enforcement seminar, carried out in cooperation with UPOV and national authorities of the Region.

### IPKey South East Asia:

- Webinar on Plant Variety Protection and the 1991 Act of the UPOV Convention (January 2022)

- Workshop on support to beneficiary countries to accession to UPOV (January 2022), presentations available on the [IPKey SEA website](https://ipkey.eu/en/south-east-asia/activities/support-accession-sea-countries-upov-1991-convention).

### AfrIPI: due to the project constraints, no activity was carried out

### OAPI: the Office gave a support in the implementation of 9 activities, of which:

- 2 national seminars on PVR system

- 4 activities concerning Quality Audit System in 4 different OAPI countries

- 2 study visits of OAPI delegation to the CPVO

- 1 training on the application process for legal and officers and examiners of OAPI

### CarIPI:

- 2022 CarIPI, together with the CPVO and UPOV, organised an in-person seminar on Regional Cooperation in PVR in the Dominican Republic

- The other activity, carried out in September 2022, concerned the protection of plant genetic resources, traditional knowledge and folklore and the interfaces with the PVR System.

### TAIEX: (Dominican Republic, Chile, Saint Vincent and the Grenadines)

- The CPVO in 2022 cooperated with 3 different countries in the implementation of TAIEX activities, together with experts from EU Member States. The activities were all targeting PVR authorities, to support them in the implementation of the national PVR system, including administrative procedures for the management of the application process, technical examination and guidelines on administrative proceedings before PVR offices.

### UPOV activities

- Attendance of all TWPs

- Attendance of the regular UPOV meetings in Geneva

- EDV WG

- WG Harvested Material

- WG on Smallholder Farmers in relation to private and non-commercial use

- Seminar on plant breeding and plant variety protection and climate change

- DUS WG

### OECD

- Attendance of the OECD Seed Scheme Technical Working Group meetings and the annual meeting

# Fruit sector

## Statistics

The table hereunder shows number of applications received by the CPVO in 5 last years for the 10 most important fruit crops in the history of the Office. The number of fruit CPVR applications slightly decreased in 2022. The top 3 crops in the history of the CPVO until 2022 remained peach, strawberry and apple, but the highest number of applications received in 2022 was for strawberry (50), peach (41) and blueberry (34).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Species** | **2018** | **2019** | **2020** | **2021** | **2022** | **Total****(1995-2022)** |
| *Prunus persica* (L.) Batsch | 21 | 34 | 47 | 37 | 41 | **1121** |
| *Fragaria x ananassa* Duchesne ex Rozier | 37 | 53 | 48 | 48 | 50 | **841** |
| *Malus domestica* Borkh. | 27 | 23 | 28 | 21 | 23 | **646** |
| *Vitis* L. | 50 | 14 | 20 | 29 | 20 | **388** |
| *Vaccinium* L. | 42 | 20 | 37 | 31 | 34 | **333** |
| *Prunus armeniaca* L. | 8 | 10 | 8 | 5 | 4 | **331** |
| *Rubus idaeus* L. | 22 | 27 | 24 | 13 | 28 | **304** |
| *Prunus salicina* Lindl. | 7 | 8 | 7 | 6 | 3 | **158** |
| *Prunus avium* (L.) L. | 12 | 8 | 5 | 13 | 2 | **156** |
| *Rubus* subg. *Rubus* | 8 | 5 | 12 | 23 | 13 | **134** |
| **Total** | **234** | **202** | **236** | **226** | **218** |  |

## The fruit expert meeting (FEM)

The CPVO held its annual meeting with EU fruit experts and representatives of the breeder’s organisations on 8 November 2022 in Angers (France) and it continued on 13 January 2023 by electronic means. The group discussed among others DUS testing related topics, financial matters, R&D project and IT tools. Here are some agenda points of the meeting:

- DUS testing of some apple mutation groups: challenges in plant health related matters

- Submission of samples

- Additional information linked to the UPOV code to group varieties

- Revision of our plant health requirements in the request for plant material

- Specific measures taken to secure DUS trials from adverse weather conditions

- Exchange of reference samples between examination offices

- Postponement of testing rules – future revision

- Procedure or taking samples from examination offices

- Pear DUS trials affected by Pear Decline

- Duration of test for Prunus rootstock varieties

- Dutch certification scheme for strawberry

- ‘Developing molecular markers allowing the distinction of apple mutants (sports)’, results – follow up’

- INVITE, apple situation

- Possibilities to store DNA extracted from the fruit varieties

- Automated phenotyping – update

- Presentation of the access to eTQs via the TLO website + TLO rewrite

- New layout of application documents – free text in boxes if not in EN - feedback

- Cost calculation, fruit related issues

- Issues of relevance from the TWF

- Funds to help SMEs (via EUIPO platform)

[Annex IV follows]

FRANCE

*[Please see the PDF version]*

[Annex V follows]

GERMANY

1. In 2023 the Bundessortenamt started 75 new examinations for PBR for varieties of fruit species. In total, there are 188 candidate varieties of 13 fruit species currently under examination at the testing station Wurzen of the Bundessortenamt; the most important of which are raspberry (50 candidate varieties under examination in 2023), strawberry (34), blackberry (47), and apple (32). The majority of actual examinations of fruit varieties at the Bundessortenamt are carried out on behalf of other PBR authorities, mostly for the CPVO. 2 varieties of European pear are currently examined for National Listing in Germany.
2. For the time being a total of 111 varieties of fruit species are under protection according to the German Plant Breeders’ Rights Act, and 1 variety has been admitted to the National List, according to the German Seed Act.

[Annex VI follows]

JAPAN

1. Number of applications in 2022

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Number | (2022/2021) | Fruits | (2022/2021)  |
| 1978 to 2022 | 36,615 | - | 2,300 | - |
| 20212022 | 776683 | (88.0%) | 6663 | (95.5%) |

Top 5 of application for Fruits in 2022

Strawberry 21, Grapevine 10, Blueberry 7, Japanese Pear 5, Kiwifruit 3.

2. Number of granted in 2022

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Number | (2022/2021) | Fruits | (2022/2021) |
| 1978 to 2022 | 29,495 | - | 1,839 | - |
| 20212022 | 590672 | (113.9%) | 3139 | (125.8%) |

Top 5 of granted for Fruits in 2022

Grapevine 10, Apple 7, Peach 5, Citrus 4, Blueberry 3, Strawberry 3.

3. National test guidelines harmonized with UPOV TGs in 2022

|  |
| --- |
| Common name of plants (7) |
| Abelia, Camellia, Chestnut, Barley, Tree peony, Eringi, Coleus |

4. National test guidelines developed for new type of species in 2022

|  |
| --- |
| Genera or Species (13) |
| *Bupleurum rotundifolium* L.*, Dichroa febrifuga* Lour.*, Disporum* Salisb.*, Dorycnium hirsutum* (L.) Ser.*, Fatsia japonica (Thunb.)* Decne. & Planch.*, Hylotelephium* H. Ohba*, Kaempferia parviflora* Wall. ex Baker*, Prunus* L.(root stock)*, Sarcococca* Lindl.*, Scindapsus pictus* Hassk. *, Sedum lineare* Thunb.*, Viburnum dilatatum* Thunb.*, Westringia* Sm. |

Web-site: <https://www.maff.go.jp/j/shokusan/hinshu/info/sinsa_kijun_jp.html>

5. Other

* To enable PBR holders to exercise their rights effectively and to have a check on any unintended outflow of their protected varieties overseas, Japan PVP and Seed Act was amended in December 2020 and took into effect on April 1, 2022. Under the amended PVP and Seed Act, any acts in respect of the propagating material of all protected varieties (including use of farm saved seeds) shall require the authorization of right holders.
* Japan continuously provides other UPOV members with examination reports under the Memorandum of Cooperation (MOC). Japan had provided 64 DUS examination reports in total to other countries in 2022.

In addition, MAFF and NCSS have been carrying out DUS examination for CPVR application of *Eutrema japonicum* (Miq.) Koidz. (syn. *Wasabia japonica* (Miq.) Matsum.) on behalf of CPVO.

* Since the establishment of the East Asia Plant Variety Protection （EAPVP）Forum in 2008, Japan continuously supports cooperative activities with the Forum member’s conducted under the EAPVP Forum 10 year Strategic Plan. The common long-term direction of the 10 year Strategic Plan is to establish effective PVP systems consistent with the UPOV Convention, with the aim of achieving UPOV membership among all South East Asian Countries as a basis for further harmonization and regional cooperation.
* Japan, Vietnam and UPOV are also working together to develop a single online application Platform “e-PVP Asia” that enables a onetime application to multiple PVP Offices connected with the PRISMA, thereby expediting the application process. The “e- PVP Asia” is also expected to facilitate cooperation in examination among participating countries. We are aiming to launch “e-PVP Asia” by early 2027.

Since 2016, based on the Memorandum of Understanding, Center for Seeds and Seedlings, NARO (NCSS) and Naktuinbouw have established Calibration Manuals for DUS technical harmonization. “Calibration manual for lettuce ver.2” was finalized in 2023, and it will be published through both of websites. With revision of this, a total of 10 Calibration Manuals will be available for third country.

[Annex VII follows]

KYRGYZSTAN

1. The State Agency of Intellectual Property and Innovation under the Cabinet of Ministers of the Kyrgyz Republic (Kyrgyzpatent) having considered the reminder of the UPOV Secretariat informs that Kyrgyzpatent conducts a preliminary examination by part 1 Article 11 of the Law of the Kyrgyz Republic.
2. The preliminary examination of the application shall include verification of

- The composition of the application and the documents attached thereto;

- The correctness of the documents as required;

- compliance with the rules for applying for a patent attorney, including the presence and correctness of the power of attorney proving the powers of the patent attorney;

- the name of the breeding achievement.

The issues listed below are:

- Use of molecular methods in DUS examination;

- databases of varietal description;

- exchange and use of software and equipment;

- experience with new varieties and species;

- cooperation in the field of expertise;

- issues related to DUS expertise in the fruit sector;

- number of growing cycles and final examination of fruit crops;

- color evaluation of fruit crops.

1. Conducted by the bilateral agreement between the State Agency for Intellectual Property and Innovation under the Cabinet of Ministers of the Kyrgyz Republic (Kyrgyzpatent) and the Department of Crop Expertise under the Ministry of Agriculture by Article 14 of the Law of the Kyrgyz Republic "On legal protection of breeding achievements" using appropriate methods of the International Union for the Protection of New Varieties of Plants (UPOV).
2. The Department of Crop Expertise under the Ministry of Agriculture based on the results of trials of a breeding achievement shall conclude the compliance of the breeding achievement to the conditions of protection and make an official description of the breeding achievement.
3. If a breeding achievement passed the distinctiveness, homogeneity, and stability tests with a positive result, Kyrgyzpatent, based on the materials of the reports and conclusions of the Department of Crop Expertise of the Ministry of Agriculture, shall decide on granting a patent.

[Annex VIII follows]

NETHERLANDS

Naktuinbouw Variety Testing developments

* As from April 2022 one junior DUS examiner joined the DUS team to replace colleagues who retired or changed jobs. The DUS team now consists of 40 employees, including 2 managers and 4 specialized in disease resistance. The Department of Variety Testing includes also a support team, a trial management team and a project team. In total there are 70 employees.
* The Variety Testing Department yearly offers a number of courses around Plant Breeders’ Rights and/or Listing. Last year almost all courses have been provided as online-sessions (Zoom/Teams).
* Applicants more and more use the online systems of UPOV PRISMA and CPVO for filing their applications for listing and/or Plant Breeders’ Rights. Nowadays it is possible to apply for Plant Breeders’ Rights for all species through UPOV PRISMA as well as for Listing in the Netherlands.

Number of applications received

In 2022, 2393 applications were received for testing for the first year for National listing, and for National or European Plant Breeders’ Rights. Applications of the same variety for Listing as well as PBR, in vegetables and in agricultural crops are split in this table.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2022 | NL listing | NL PBR | EU PBR | TOTAL |
| *Agriculture* | 252 | 70 | 42 |   |
| *Vegetable* | 717 | 453 | 58 |   |
| *Ornamental  (incl. trees)* |   | 161 | 640 |   |
| TOTAL | 969 | 684 | 740 | 2393 |

DUS projects

*Digitisation*

* Naktuinbouw continues to work on the expansion of the Naktuinbouw Academy: a digital training platform.
* Databases: Naktuinbouw develops SNP-databases in French bean, Rose, Lettuce, Onion, Hemp and Tomato. Some databases are developed nationally, others in international projects (e.g.IMODDUS). The projects are funded by amongst others the Dutch board for plant varieties and CPVO.

*EU projects: Database Melon, Harmorescoll and INVITE and IPKey*

* An EU database for melon varieties is developed by cooperation between France, Portugal, Slovakia Spain and the Netherlands. The development is funded by CPVO. In 2021 the project has been finished and continuation in cooperation is agreed.
* Harmorescoll: in this project the reference material for obligatory disease resistance tests will be harmonized.
* The EU project INVITE on the improvement on DUS and VCU. Naktuinbouw is one of the partners in this program.
* Imoddus join a project on setting up resistance tests to *Aphis gossypii* in Melon
* Naktuinbouw continues to support IPKey projects

*Other projects*

* Study on minimum distances in Tulip 2021-2023.
* Studies on DUS and VCU testing in True Potato Seeds
* Automatic morphological descriptions of ornamental crops through machine learning. [https://www.wur.nl/nl/Onderzoek-Resultaten/Onderzoeksinstituten/plant-research/biometris/show-biometris/MODOMA-Deep-Learning-in-sierteelt.htm](https://eur04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.wur.nl%2Fnl%2FOnderzoek-Resultaten%2FOnderzoeksinstituten%2Fplant-research%2Fbiometris%2Fshow-biometris%2FMODOMA-Deep-Learning-in-sierteelt.htm&data=04%7C01%7CM.hoffman%40naktuinbouw.nl%7Cb726db346db84d0a784208da16ddff17%7C6539375e88934d028b2165c65c057157%7C0%7C0%7C637847439962587144%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=Vp6l0eGK9ZdKLsoo2B9ZOTTzyD%2B6Har48d5jIBjVu84%3D&reserved=0)
* Develop a disease resistance test for ZYMV in courgette

*International cooperation 2023*

* Since 2022, a holistic project has been started in the Philippines with the funds provided by RVO. The project aims to share knowledge and provide trainings for the development of the Philippines National Seed Technology Park (NSTP) project. The project continues until July 2024.
* In 2023, Naktuinbouw hosted the Sounding Board meeting of SeedNL, received a delegation from Morocco regarding knowledge exchange for DUS trials of fibre-cannabis and will receive experts from Colombia in October for a DUS training on Cannabis under the TAIEX project.
* Another TAIEX project with Japan regarding the exchange of knowledge on molecular techniques for infringements of plant breeder rights is under planning.

*PVP Development Program (Toolbox)*

* This is a tool to help countries to develop, improve and implement their Plant Breeders’ Rights system. The first 5 years period has been finalised successfully. The Dutch Ministry has made another 5 years of funds available (2022-2027) for the implementation of this program. In 2023, different PVP projects in 11 countries are being carried out.

More info: PVP Development Program – PVP Toolbox | Naktuinbouw or contact: PVPToolbox@naktuinbouw.nl

*Plant Breeders Rights training course.*

* In 2022, the course was presented in an online format. In 2023, the course will be split into four separate e-learnings, each with its own theme. The courses will probably start this fall.

More information: [https://www.naktuinbouw.com/bulb/training-course/plant-breeders%E2%80%99-rights-food-security-and-economic-development](https://eur04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.naktuinbouw.com%2Fbulb%2Ftraining-course%2Fplant-breeders%25E2%2580%2599-rights-food-security-and-economic-development&data=05%7C01%7CM.hoffman%40naktuinbouw.nl%7Ca60bb18e49b5409c99b008db3c105331%7C6539375e88934d028b2165c65c057157%7C0%7C0%7C638169813039815484%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=9PrrCw1UvrM5CwGKT7u929Z7WZKfPUnnzu8JwUK4Zm8%3D&reserved=0) or contact: l.pinan.gonzalez@naktuinbouw.nl

[Annex IX follows]

NEW ZEALAND

1. Application numbers for fruit varieties in the 2022/23 period have halved in comparison with previous years, with 15 new fruit applications accepted. These included four (4) apple varieties, four (4) kiwifruit, two (2) peach, one (1) nectarine, one (1) sweet cherry, one (1) raspberry, one (1) blueberry, and one (1) grape. At the conclusion of 2022/2023 there were 154 fruit varieties under examination.
2. Apple and Kiwifruit varieties comprise the highest percentage of new fruit applications in New Zealand each making up 25% of applications in 2022/2023. Kiwifruit applications have increased by 20% in the last twelve months. Applications for strawberry and blueberry varieties have decreased significantly with no new strawberry applications filed. Currently there are still 26 blueberry varieties and 19 strawberry varieties under test.
3. The Apple Cultivar Centre, home of the PVR Variety Collection for *Malus*, has been severely impacted by Cyclone Gabrielle which hit eastern parts of New Zealand’s North Island, in particular Gisborne (Tairawhiti) and Hawkes Bay, in February 2023. Over 80 varieties, both candidate and reference, will need to be either re budded or replaced with commercially available trees in the next two years, which may have a negative impact on DUS testing in the short term. A plan is now in place to work cooperatively with variety owners or agents to source replacement plant material for both reference and candidate varieties.
4. ‘In person’ meetings and training sessions have resumed in the last 12 months with international and national travel now possible. A DUS training workshop was recently run in Christchurch, the first since 2018, which included the PVR regional describers, Examiners from IP Australia, and Plant and Food Research staff involved with DUS testing.
5. The Plant Variety Rights Act 2022 and the Plant Variety Rights Regulations 2022 came into force on 24 January 2023. The new law contains elements of the 1991 Act of the UPOV Convention, with additional provisions for applications for varieties belonging to taonga (treasured) species, primarily species of native plants. These provisions will come into force in late 2023 and are intended to address obligations under the Treaty of Waitangi and include establishment of the Māori Plant Varieties Committee. All parts of the new law are intended to be in force by early 2024. The Plant Variety Rights Act 2022 will run in parallel with the Plant Variety Rights Act 1987 because there are no retrospective provisions in the new law. This dual system could potentially continue for the next 25 to 30 years

[Annex X follows]

SOUTH AFRICA

# TWP PBR STATISTICS FOR FRUIT CROPS FOR SOUTH AFRICA ENDING 31 DECEMBER 2022

With reference to Applications and valid Plant Breeders’ Rights for 2022 the following is reported:

* No additional taxa for fruit crops have been declared in terms of the Plant Breeders’ Rights Act during **2022.**
* **263** PBR applications were received of which **42% [109] for Fruit crops.**
* As of December **2022**, a **TOTAL** of **3637** varieties had valid plant breeder’s rights in South Africa, of which  **30%** were **for Fruit** crops.

|  |
| --- |
| The top three fruit crops were: |
| 1. *Prunus persica* (L.) Batsch var. *nucipersica* Schneid. [**176**]2*. Vitis* L. [**173**]3. *Malus* Mill. [**104**] |

# TWP PBR STATISTICS FOR SOUTH AFRICA ENDING 31 DECEMBER 2022

With reference to Applications and valid Plant Breeders’ Rights for 2022 the following is reported:

* One additional taxa have been declared in terms of the Plant Breeders’ Rights Act during **2022.**
* **263** PBR applications were received of which **37% [96] were for Agricultural crops**,  **10% [29] for Ornamental crops, 42% [109] for Fruit crops** and **11% [29] for Vegetable crops**.
* As of December **2022**, a **TOTAL** of **3637** varieties had valid plant breeder’s rights in South Africa, of which  **23% were for Ornamental** crops,  **39% for Agricultural** crops,  **30% for Fruit** crops and  **8% for Vegetable** crops. The top three crops for each crop are:

|  |
| --- |
| **FRUIT CROPS** |
| 1. *Prunus persica* (L.) Batsch var. *nucipersica* Schneid. [**176**]2*. Vitis* L. [**173**]3. *Malus* Mill.  [**104**] |

|  |
| --- |
| **AGRIC CROPS** |
| 1. *Zea mays* L. [**674**]2*. Glycine max.* (L.) Merrill*.*  [**165 GMO + 12 CONV**]3. Triticum L. [123] |

|  |
| --- |
| **ORNAMENTAL CROPS** |
| 1. *Rosa* L. [**307**]2*. Chrysanthemum* L. [**84**]3. *Aloe* L. [**48**] |

|  |
| --- |
| **VEGETABLE CROPS** |
| 1. *Solanum lycopersicum* L. [**59**]
2. Phaseolus vulgaris L. **[34]**
3. Capsicum L. [26]
 |

 White CONV **51**

White open pollinated **6** White GMO **222** Yellow CONV **113** Yellow GMO **247**

Hybrid White **24**

Sweetcorn **11**

[End of Annex X and of document]