

Annual Report — 2021





Annual Report **2021**

Printed b	y Imprimerie Centrale in Luxe	mbourg		
Manuscr	ipt completed in June 2022			
	the CPVO nor any person action the following information.	cting on behalf of th	ne CPVO is responsible for	the use that might be
Luxemb	ourg: Publications Office of t	he European Union,	2022	
Print PDF	ISBN 978-92-9152-215-6 ISBN 978-92-9152-216-3	ISSN 1680-2845 ISSN 2363-3247	doi:10.2803/825586 doi:10.2803/362434	TG-AC-22-001-EN-C TG-AC-22-001-EN-N
© Comm	nunity Plant Variety Office, 20)22		

For any use or reproduction of photos or other material that is not under the CPVO copyright, permission

Reproduction is authorised provided the source is acknowledged.

must be sought directly from the copyright holders.

CONTENTS

1.	Welcome message from Francesco Mattina, President of the CPVO	5
2.	Foreword by Marien Valstar, Chair of the CPVO Administrative Council	6
3.	The Community plant variety rights system	8
4.	The Administrative Council	10
5.	Organisation of the CPVO	14
6.	Quality Audit Service 6.1. Assessment of examination offices 6.2. Audit programme	20 20 20
7.	 Research and developments projects 7.1. The new CPVO R & D strategy 2021-2025 7.2. Situation as regards candidate R & D projects 7.3. Situation as regards ongoing projects 7.4. Finalised research and development projects 7.5. The CPVO as a partner in the Horizon 2020 Invite project 	24 24 24 25 28 29
8.	Budget 8.1. Out-turn 8.2. Revenue 8.3. Expenditure 8.4. Conclusion	32 32 32 33 34
9.	Developments in the system 9.1. Regulatory 9.2. Technical	35 35 35
10.	Variety denominations 10.1. The CPVO Variety Finder 10.2. Cooperation in denomination testing	61 61 63
11.	Information technology (IT)	67
12.	Cooperation with the Directorate-General for Health and Food Safety 12.1. Standing Committee on Community Plant Variety Rights 12.2. Standing Committee on Plants, Animals, Food and Feed 12.3. Council working parties	68 68 69
13.	External relations 13.1. Cooperation with external organisations 13.2. Training and promotion of the Community plant variety rights systems.	70 70 em 74

14. Public access to documents	79
15. Report of the Data Protection Officer	81
15.1. Legal background	81
15.2. Role and tasks of the data protection officer	81
15.3. Report of the data protection officer for 2021	82
16. Appeal procedures	86
16.1. Composition of the Board of Appeal of the CPVO	86
16.2. Decisions of the Board of Appeal in 2021	86
16.3. Further actions to the Court of Justice in 2021	87
16.4. Appeals received by the CPVO and decisions reached by the	
Board of Appeal since its inception (statistics)	89
17. Conflicts of interest	93
18. Main acronyms, initialisms and abbreviations	94

WELCOME MESSAGE FROM FRANCESCO MATTINA, PRESIDENT OF THE CPVO



Francesco Mattina

During 2021, the Community Plant Variety Office (CPVO) continued operating in a hybrid mode, with teleworking being the preferred work pattern, virtual meetings and without being able to travel and revert to ordinary business as before the pandemic.

Nevertheless, CPVO staff and stakeholders were already acquainted with this new way of cooperating with each other and, sometimes, cutting distances and the need for traveling was beneficial to a more continuous engagement.

Operationally speaking, also 2021 can be seen as a positive year for grants, with more than 2800 titles granted against 3480 applications received, and despite a slight increase in surrenders.

The 2021 was marked by an increased attention to support the implementation of European policies in the framework of the European Green Deal, the Farm to Fork and the Biodiversity strategies and a specific interest in developing policies for the benefit of the backbone of the European economy, the small and medium-sized enterprises (SMEs) under the European intellectual property (IP) action plan.

The CPVO kept on supporting the European Commission (EU) and the European Union Intellectual Property Office (EUIPO) in their outreaching efforts in international activities. At the moment, the CPVO is contributing to the implementation of six international cooperation projects world-wide, with the aim of promoting the development and consolidation of effective plant variety protection systems, based on the Union for the Protecting of New Varieties of Plants (UPOV) 1991 Convention.

A sectorial study to assess the socio-economic impact of the EU plant variety right (PVR) system in the EU has been conducted by the Observatory on Infringements of IP rights. The study examines how the EU PVR system can leverage sustainability in agriculture and horticulture in the context of the EU Green Deal and the UN Sustainable Development Goals.

In late 2021, the new Regulation on the extension of protection for certain species came into force. Regarding legislative news, the targeted revision of the Basic regulation (BR) has been announced in the European IP action plan.

Moreover, the CPVO is contributing to the update by the European Commission of the existing legislation on the production and marketing of plant reproductive material ('PRM study'), to better align the said legislation with the goals of the European Green Deal and the Farm to Fork, Biodiversity and Climate Adaptation Strategies.

Last but not least, at the very end of 2021, I was appointed as President of the CPVO, and I am honoured to continue the work of my predecessors in building an ever more digital, user-centric, modern and efficient agency.

POREWORD BY MARIEN VALSTAR, CHAIR OF THE CPVO ADMINISTRATIVE COUNCIL



Marien Valstar

In 2021, Francesco Mattina took over the role of President of the CPVO and we had to say goodbye to Martin Ekvad after two successful mandates. I wish Francesco all the best and I would like to thank Martin for his services to the CPVO.

The new president of the CPVO presented the Annual Activity Report for the year 2021 to the Administrative Council (AC) on 27 April 2021.

As in 2020, because of the COVID-19 pandemic the Community Plant Variety Office continued operating in a hybrid mode, with teleworking, virtual meetings, and the inability to travel. Nevertheless, the continuity of the work done at CPVO, including the Examination Offices (EOs), was to the expected high standard. No backlogs were observed and over 2800 new PVR were granted in 2021. This high number shows that an effective system of plant variety protection is not only very important for a sustainable and economic resilient agriculture, but that an effective system really promotes the development of new innovative plant varieties. Hopefully the study to assess the socio-economic impact of the EU PVR will give additional evidence on how the EU PVR system can leverage sustainability in agriculture in the context of the EU Green Deal and the UN Sustainable Development Goals. That evidence will be useful in coming studies and debates on the planned revision of the Basic regulation. Preceding this revision, a new regulation on the extension of protection for certain species came into force, improving the likelihood of continued investment by plant breeders in the amelioration of those species.

Next to the main task of CPVO and despite the COVID-19 pandemic, many new initiatives on an EU level are having an impact on the work done at CPVO and its broader network and are shaping the future work. To mention a few: the European Green Deal, the Farm to Fork and the Biodiversity strategies and the European IP action plan, developing policies for the benefit of the backbone of the European economy, the SMEs. Many plant breeders as well as farmers are part of that category.

These results and new initiatives show that plant breeding and variety protection play an important and active role for society at large.

The indicators, provided in this report, show that the objectives set in the 2021 work programme were satisfactorily achieved.

The AC takes note of the management report, and especially the part related to Budget and Financial Management. It also takes note of the Assessment by the Management and the Declaration of Assurance.

The AC is satisfied with the declaration of the authorising officer, that the report gives a true reflection of the situation on the ground and that reasonable assurance can be had that the resources assigned to the activities described in the report have been used for their intended purpose. The AC also accepts that such activities were carried out in accordance with the principles of sound financial management. The AC is satisfied that

the control procedures in place provide an adequate guarantee as to the legality and regularity of the affairs of the CPVO.

The AC is satisfied that the president of the CPVO is unaware of any matter not reported which could harm the interests of the CPVO.

THE COMMUNITY PLANT VARIETY RIGHTS SYSTEM



Ornamental plant production in greenhouse

From its foundation and over its 25 years of functioning the CPVO has managed the Community plant variety rights (CPVR) system by granting an intellectual property right for protecting new plant varieties with unitary effect throughout the whole territory of the EU via a single application to the CPVO.

The CPVR system is not intended to replace or even to harmonise national systems but rather to exist alongside them as an alternative. Indeed, it is not possible for the owner of a plant variety to simultaneously exploit a CPVR and a national right granted in relation to that variety. Where a CPVR is granted in relation to a plant variety for which a national right or patent has already been granted, the national right or patent is rendered ineffective for the duration of the CPVR.

The legal basis for the CPVR system is found in Council Regulation (EC) No 2100/94 on CPVR (the Basic regulation). On receipt of an application for a CPVR, the CPVO must establish that the variety is novel, that it satisfies the DUS criteria, and that a suitable variety denomination has been registered. Following the fulfilment of the formal and substantive examinations of applications, the CPVO arranges for a technical examination to determine the distinctness, uniformity, stability (DUS), to be carried out by the entrusted Examination Offices (EOs) in the Member States or by other appropriate authorities outside the EU. To avoid unnecessary duplication of work where such a technical examination is being – or has already been – carried out in relation to a variety for official purposes, the CPVO may, subject to certain conditions, accept the results of that examination by taking over the report concerned.

Anyone may lodge an objection to the granting of a CPVR with the CPVO in writing and within specified time limits. The grounds for objection are restricted to allegations either that the conditions laid down in Articles 7 to 11 of the BR are not met (DUS, novelty or entitlement) or that the proposed variety denomination is unsuitable due to one of the impediments listed in Article 63 of the BR. Objectors become parties to the application proceedings and are entitled to access relevant documents. After the grant, a CPVR may be declared null and void ex officio by the CPVO or further to a request from a third party on one of the conditions laid down in Article 20 of the BR. A third-party seeking annulment of a CPVR must adduce evidence and facts of sufficient substance to raise serious doubts as to the legality of the grant of a CPVR following the examination provided for in Articles 54 and 55 of the BR. A CPVR can also be cancelled on one of the grounds established under Article 21 of the BR.

Except in two specific instances where a direct action against a decision of the CPVO may be brought before the Court of Justice of the European Union, a right of appeal against such a decision lies with the CPVO Board of Appeal consisting of a chair appointed by the Council of the European Union and two other members selected by the chair from a list adopted by the AC. The addressee of a decision, or any person who is directly and individually concerned by the decision, may appeal against it. After examining the appeal, the Board of Appeal may exercise any power that lies within the competence of the CPVO or refer the case back to the CPVO, which is bound by the decisions of the Board of Appeal. Actions against decisions of the Board of Appeal may be brought before the Court of

Justice of the European Union, based in Luxembourg. Decisions of the Board of Appeal and of the Court of Justice of the European Union are published in the CPVO case-law database on the CPVO website. Section 16 of this document provides a recap of all Board of Appeal decisions, the actions brought against the CPVO Board of Appeal decisions before the General Court, and the further legal proceedings brought before the Court of Justice of the EU, against the General Court judgments.

Figures 18 and 20 in Section 16 show the number of notices of appeal lodged with the CPVO Board of Appeal and the number of decisions reached by the Board of Appeal sorted out by references to the legal basis of the contested decisions.

Once granted, the duration of a CPVR is 25 years, or 30 years in the case of potato, vine, and tree varieties. The legislation has extended the duration of protection for a further 5 years in relation to specific genera or species (see paragraph 9.1.1). The effect of a CPVR is that certain specified activities in relation to variety constituents or the harvested material of the newly protected variety require the prior authorisation of the titleholder. Such authorisation may be granted subject to conditions and limitations. Infringement of a CPVR entitles the titleholder to commence civil or penal proceedings in the courts of the Member States against the perpetrator of the infringement.

Registers, which are open to public inspection, contain details of all applications received, all CPVR granted by the CPVO, and appeal documents held in the Board of Appeal register. The Official Gazette of the Community Plant Variety Office is published every two months and contains the information entered in the registers. Information on applications and PVR (or 'rights') in force is accessible via the CPVO website.

4. THE ADMINISTRATIVE COUNCIL

The CPVO is supervised by an Administrative Council comprising representatives of the Member States and the European Commission, and their alternates. The AC monitors the activities of the CPVO. In particular, it is responsible for examining the president's management report, adopting the budget of the CPVO, and granting a discharge to the president in respect of its implementation. In addition, it can provide advice, establish rules on working methods within the CPVO, and issue guidelines on technical examinations, committees of the CPVO, and general matters.

In 2021, the COVID-19 pandemic continued to impact Administrative Council meetings and the three meetings had to be held virtually via Microsoft Teams over the year.

The first meeting of the year took place on 14 April with 27 Member states represented.

During the meeting, the consolidated annual activity report for 2020 was presented providing a complete overview of the CPVO's activities for 2020 and including the AC Analysis and Assessment adopted and signed by the chairperson of the AC. The AC adopted a decision to discharge the president of the CPVO for the implementation of the 2019 budget.

The AC also took note of the implementation of the strategic plan 2017-2021 and of the Single Programming Document (SPD) 2022-2024.

Regarding the preliminary draft budget, the members of the Administrative Council supported the CPVO proposal of three additional posts for 2022 and indicated that they were favourable to the further increase of three, to 51 in 2023, in order to ensure high quality services to its users as well as to answer to the increased administrative burden to be carried out.

The AC members also adopted the following.

- The extension of the duration of the five decision-making committees for 5 years, from 1 January 2021 until 31 December 2026.
- The research and development (R & D) strategy 2021-2025, as amended by the Commission and endorsed that the CPVO would draft a plan to implement the IP action plan of the Commission, including consulting with the breeders, to support SMEs in the breeding sector. The plan was indeed presented in the autumn meeting and the AC took note of the proposals.
- The creation of a Users Working Group on information technology (IT) projects with updated terms of reference including comments made by Sweden.
- The reporting officers for the president and the vice-president of the CPVO.

The autumn meeting was held virtually via Microsoft Teams on 7 October 2021.

The AC took note of the state of play regarding the Business Continuity Plan and the report on the management of the COVID-19 crisis.

The AC adopted the 2022 budget and agreed on the single programming document for 2022-2024.

The AC members also adopted the amended version of the CPVO conflict of interest policy.

The revision of the international strategy was agreed upon, by including the amendments made by the Commission.

The AC members expressed in favour of merging the costs groups for which breeders' organisations have not expressed any reservation. As regards the two alternative proposals from the Dutch Association for the Plant Reproduction Material Sector (Plantum) as well as from the Swedish Board of Agriculture, the AC members expressed in favour of creating a new working group with specific mandate to consider those proposals and endorsed the draft terms of reference as proposed with attendance composed of experts proposed by the technical liaison officers (TLOs), AC members, breeders' organisations representatives and the CPVO.

During both meetings the AC took several other decisions and approved a number of technical protocols.

Finally, as part of the two distinct procedures for the recruitment of the president of the CPVO and of the alternate to the chairperson of the Board of Appeal, an in-camera meeting of the Administrative Council took place on 7 September 2021 in order to interview candidates. The results of the meeting were transmitted the European Commission in charge of the recruitment, and final decisions were taken by the Council on 20 December 2021 (Official Journal (OJ) C27 of 19 January 2022) appointing Mr. Francesco Mattina as President of the CPVO for 5 years and Mr. Marcus Navin-Jones as alternate to the Chairperson of the Board of Appeal for 5 years.

Table 1

Chair of the Administrative Council

M. Valstar since 5 October 2020

Vice Chair of the Administrative Council

M. José Antonio Sobrino Maté since 5 October 2020

Members of the Administrative Counc	il
Belgium	S. Boens (member)
	G. Bailleux (alternate)
Bulgaria	B. Pavlovska (member)
	T. Gadev (alternate)
Czechia	D. Jurecka (member)
	A. Povolná (alternate)

Members of the Administrative Council	
Denmark	K. Riskaer (member)
	K. Bech Klindt (alternate)
Germany	E. Pfuelb (member)
	C. Farr (alternate)
Estonia	L. Puur (member)
	(alternate vacant)
Ireland	D. Coleman (member)
	E. Hyland (alternate)
Greece	S. Kosmas (member)
	A. Georgoula (alternate)
Spain	J. A. Sobrino Maté (member)
	B. M. Rodriguez Sendon (alternate)
France	A.C. Cotillon (member)
	M. Omrani (alternate)
Croatia	I. Delic (member)
	Z. Cegur (alternate)
Italy	I. Pugliese (member)
	(alternate vacant)
Cyprus	C. Christou (member)
	A. Georgiadou (alternate)
Latvia	I. Ovsjannika (member)
	(alternate vacant)
Lithuania	S. Juciuviene (member)
	(alternate vacant)
Luxembourg	M. Weyland (member)
	F. Kraus (alternate)
Hungary	Z. Csurös (member)
	K. Miklo (alternate)
Malta	M. Delia (member)
	M. Cardona (alternate)
Netherlands	M. Valstar (member)
	B. Scholte (alternate)
Austria	K. Mechtler (member)
	(Alternate vacant)
Poland	H. Bujak (member)
	M. Behnke (alternate)
Portugal	A. P. Cruz de Carvalho (member)
	T. Afonso (alternate)
Romania	M. Popescu (member)
	M. Ciora (alternate)

Members of the Administrative Council	
Slovenia	J. Ilersic (member)
	J. Cvelbar (alternate)
Slovakia	K. Hanzelyova (member)
	(Alternate vacant)
Finland	T. Hietaranta (member)
	H. Kortemaa (alternate)
Sweden	J. Weibull (member)
	C. Knorpp (alternate)
European Commission	B. Van Goethem (member)
	D. André (alternate)

5. ORGANISATION OF THE CPVO



CPVO headquarters, Angers, France

On 31 December 2021, the CPVO employed 49 statutory staff. On 31 August 2021, Mr Martin Ekvad ended his mandate as President, while Mr Francesco Mattina was acting President until 31 December 2021.

The CPVO is organised internally into three units, the technical unit, administrative unit and since 2021, the IT unit. The CPVO is also supported by a legal service and a Quality Audit Service (QAS) team leader responsible for the quality auditing of EOs. This service is under the administrative responsibility of the president while being independent with regard to its audit operations. A communication manager, together with a senior adviser on technical matters and R & D projects is also reporting directly to the president.

The technical unit has the following principal tasks: general coordination of the various technical sectors of the CPVR system; reception and checking of applications for protection; organisation of technical examinations or takeover of DUS reports; examinations of variety denominations; granting of CPVRs; keeping of the CPVO registers of applications and granted rights; dealing with official technical publications; relationships with applicants, national offices, stakeholders and international organisations on technical matters; active participation in international committees of technical experts; and cooperation in the development of technical analysis and studies intended to improve the system (namely CPVO R & D projects). Moreover, advice is given to the Member States in relation to variety denomination proposals received within the framework of national listings and national plant breeders' rights.

The administration unit consists of the following four sectors.

- The administrative sector (internal control) which deals with the coordination of internal and external audits, as well as the reporting of the activities of the CPVO to the European Commission.
- The accounting sector, which deals with the management of financial transactions; treasury management; maintenance of the budgetary and general accounts and preparation of budgets and financial documents; and the management of the fees system.
- The human resources sector, which deals with the administration and management of the CPVO's human resources in compliance with the Staff Regulations of Officials and the Conditions of Employment of Other Servants of the EU (hereinafter referred to as the staff regulations).

The IT unit ensures that the CPVO runs smoothly in terms of computing. Its tasks include the analysis of the CPVO's hardware and software requirements; design, development, and installation of new programmes specific to the CPVO; development and maintenance of the CPVO's websites; installation of standard programmes; maintenance of computer installations and their administration; ensuring the security of the computer system; running the helpdesk; and inter-institutional cooperation in computing.

The legal service provides legal advice to the president and other staff members of the CPVO, in principle on any legal matters related to the CPVR system, but also on questions

of administrative nature; provides legal interpretations and opinions and also draws up draft legislation; participates in various CPVO committees, thus ensuring that EU procedures and legislation are complied with; manages the administration of objections to applications for CPVR; and provides the secretariat of the CPVO's Board of Appeal.

The legal service is also responsible for the public procurement and the administration, management and monitoring of the CPVO's inventory of movable property and buildings, and the administration of logistical and operational resources with a view to ensuring the smooth functioning of the CPVO.

A communication sector, which was integrated to the presidency in 2020, is responsible for communication and outreach activities, including media and public relations, publications, and events.

The data protection officer (DPO) role, which used to be filled internally in the CPVO, is now outsourced, and managed through a service-level agreement with EUIPO, with the support of a CPVO data protection coordinator.

The QAS is responsible for verifying that EOs meet the quality standards required for providing services to the CPVO in the area of testing the compliance of candidate varieties with the DUS criteria.

In 2021, six trainees joined the CPVO under the traineeship procedure which allows university graduates to gain experience in the CPVO for a period of 12 months. As of 31 December 2021, five of them were still present. The CPVO also employed an interim agent (contract for a limited period of time through a temping agency) in the legal unit, and an IT external consultant employed by a subcontractor was present at the CPVO (on a half-time basis).

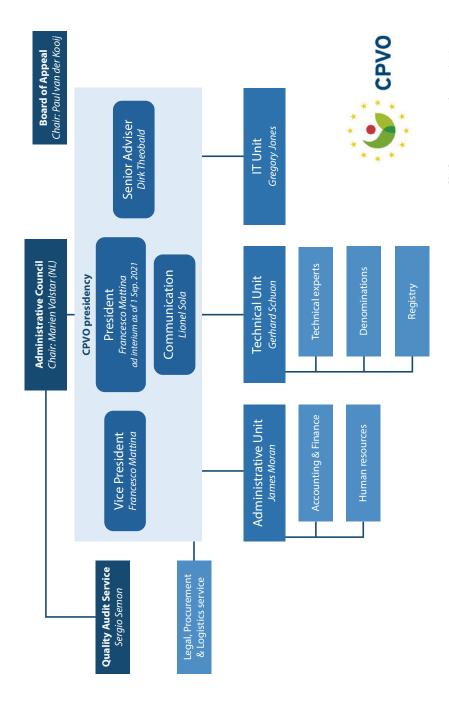
Trainees at the CPVO in 2021

Name	Title	Unit
Alexandre Zanatta Miura	Trainee	Legal Unit
Maja Karczewska	Trainee	Legal Unit
Florian Bleuet	Trainee	Legal Unit
Natalia Zampieri	Trainee	Legal Unit
Sascha Van der Veen	Trainee	Communication

External staff at the CPVO in 2021				
Maël Godar (half time)	External consultant	Administration Unit (IT sector)		
Eduardo Lauro	Interim agent	Legal Unit		

In 2021, the CPVO prepared a social report with information concerning the staff turnover, work environment and social aspects of the CPVO. The different headings covered in the report were employment (staff members, recruitment procedures, staff joining or leaving the CPVO, promotions, absenteeism, gender balance), working conditions (hours worked, part-time work, parental leave, teleworking), training (language training, IT training, other training), and professional relations (Staff Committee). The CPVO social reports from 2006 to 2016 can be consulted on the CPVO website ('About us/What we do/Reports/ Social Report). Since 2017, the social report has been integrated as a chapter in the 'Consolidated Annual Activity Report' included in the reports section on the CPVO website.

ORGANISATION CHART OF THE CPVO



CPVO STAFF MEMBERS

PRESIDENCY	
President by Interim/Vice President/Head of LS	Francesco Mattina
Senior Adviser	Dirk Theobald
Communication	Lionel Sola
Assistant to the Presidency	Laurence Dumont
LEGAL SERVICE (LS)	
Legal Affairs	Montserrat García-Moncó Fuente
Legal Affairs	Orsola Lamberti
Legal Affairs	Angela Martinez Lopez
Legal Officer	Sara Piva
Secretariat Board of Appeal	Anne Gardener
Procurement and Logistics	Véronique Doreau
Procurement and Logistics	Fabienne Santoire
Procurement and Logistics/Communication	Isabelle Lanteri
Procurement and Logistics	Manuel Teixeira
Procurement and Logistics	Thierry Cluzeau
ADMINISTRATION UNIT (AU)	
Head of the AU	James Moran
Accounting & Finance	Anne-Marie Fernandez
Accounting & Finance	Ekaterina Mantziaris
Accounting & Finance	Christophe Yakovleff
Accounting & Finance	Paul Bodero
Evaluation/Internal Audit and Control	Anna Verdini
Human resources	Annamaria Sideri
Human resources	Cyrille Antoine
Human resources	Valérie De Caestecker
Human resources/Training	Roseline Fagel
IT UNIT (IT)	
Head of the IT	Gregory Jones
Information technology	Sébastien Beugnier
Information technology	Laura Naie
Information technology	Marc Rouillard
Information technology	Juan Manuel Sanchez Navas
Information technology	Ioannis Krommydas

TECHNICAL UNIT (TU)	
Head of the TU	Gerhard Schuon
Deputy Head of the TU	Jean Maison
Assistant to the Head of the TU	Aline Noguès
Biomolecular techniques	Cécile Collonnier
Denominations	Carole Bonneau
Denominations	Rudi Caes
Denominations	Bénédicte Legrand
Fruit and ornamental species	Urszula Braun-Młodecka
Ornamental species	Laetitia Denécheau
Ornamental species	Jens Wegner
Vegetable species	Céline Morineau
Agricultural and vegetables species	Bronislava Bátorová
Technical Unit assistant	Ghislaine Guilbert
Technical Unit assistant	Laurence Théodore
Technical Unit assistant	Deirdre Killeen
Registry	Nadège Grantham
Registry	Pierre-Emmanuel Fouillé
Registry	Giulio Serafino
QUALITY AUDIT SERVICE (QAS)	
Quality Audit Team Leader	Sergio Semon

 $\hbox{NB: The above organisation chart comprises the staff of the CPVO employed as officials, temporary and}\\$ contract agents on 31 December 2021.

6. QUALITY AUDIT SERVICE

The QAS implements the CPVO's quality audit programme. It carries out regular assessments at EOs to check whether they fulfil the entrustment requirements when testing candidate varieties against the DUS criteria. The assessments relate to any work in relation to DUS activities for species within the scope of entrustment of the Examination Offices.

6.1. Assessment of examination offices

After the tumultuous effect which the COVID-19 pandemic had on the activities of QAS in 2020, things gradually got back to normal in 2021. As reported in last year's annual report, most of the assessments programmed for 2020 had to be rescheduled to 2021; in total there were eight of these. Fortunately, all eight of the reprogrammed assessment exercises for 2021 were able to be completed. The first four assessment exercises in the first half of the year were carried out on-line via virtual means, whilst also utilising live filming sequences in DUS trial grounds (see section 6.2 below). The other four assessment exercises in the second half of the year were carried out on-site by the QAS team, since by then the rolling-out of the COVID-19 vaccination programme throughout the EU during the spring and the subsequent implementation of the EU Digital COVID-19 Certificate as from July, meant that the travelling situation had improved.

There was a total of 22 non-conformities in the eight QAS assessments carried out on examination offices in 2021. Corrective action measures were initiated in response to these, most of which could be remedied within a reasonable time frame by the examination offices in question. The most common theme continues to be incomplete variety collections and issues related to these, such as the failure to communicate to the CPVO the non-submission of CPVR protected varieties, not taking into account certain varieties of common knowledge within the inventory, etc. QAS also continues to discover cases where the use of technically qualified bodies (TQBs) by examination offices is not properly notified to the CPVO.

There were two positive entrustment recommendations made to the members of the CPVO Administrative Council in April 2021 based on the assessments which were able to be completed in autumn 2020. A further five positive entrustment recommendations were made to the AC in October 2021 based upon QAS assessment exercises undertaken in the first half of the year.

6.2. Audit programme

Having learnt the lessons of how the COVID-19 pandemic affected severely the audit programme in 2020, QAS set about at the beginning of 2021 to develop a "Plan B", which relied upon carrying out the assessment exercises by virtual teleconferencing means, and QAS receiving more documentation from the examination office in advance of the actual assessment date. The "Plan B" would only be applied if it was not possible for the QAS team

to travel to the assessed examination office and to carry out the assessment under safe conditions once on-site.

The implementation of the aforesaid "Plan B" has proved invaluable since it ensured the continuing activities of QAS and the schedule of assessment exercises for the year. The advantages of the virtual assessment over a normal on-site assessment exercise are that:

- the team leader has instantaneous access to all the CPVO tools, in particular the IT databases.
- there are significant time and cost savings in relation to travelling on mission.

Notwithstanding the above, on-site assessment exercises continued to be privileged due to:

- the QAS team being able to view, and experience, and the working conditions and facilities at the examination office rather than through the prism of a screen,
- social contacts can be established between the QAS team and the auditees, thus
 creating a greater rapport between both sets of actors, which leads to a more productive
 assessment exercise since there is more transparency in the gathering and analysis of
 information.

The experience gained by QAS from the four virtual assessment exercises was used to refine the procedure for "Plan B", and this was subsequently integrated into the CPVO's business continuity plan (BCP) in autumn 2021.

A large part of 2021 was also consecrated to the procedure for the revision of the entrustment requirements (ER), whose current version dates back to the end of 2015. The subsequent 6 years have seen changes in the way DUS testing is performed and the CPVO felt that this should be reflected in an updated version of the ER, which should also take into account the impact of climate change as well as bring greater clarity to certain areas of the current ER. Several internal brainstorming sessions were held at the CPVO during the course of the year, and the draft of a revised ER was presented to the annual examination offices'meeting in December 2021. There were numerous exchanges and constructive proposals for improvements made by the CPVO stakeholders during the afore mentioned meeting. Based upon these, the CPVO has prepared a final draft of the ER which will be presented to the AC for approval in its session of April 2022. Once approved, the new ER will serve as the basis by which the CPVO's entrusted examination offices will perform even higher quality DUS testing as from the forthcoming 2023 to 2025 assessment cycle.

Finally, in the framework of CPVO's international relations strategy and following the expressed interest by plant variety protection authorities, the CPVO's entrustment programme and related audit scheme was presented at various fora, although all of these were done via webinars or virtual meetings. Following the involvement of QAS in the evaluation exercises of the African Intellectual Property Organisation (OAPI) examination authorities in Cameroon, Senegal, Ivory Coast and Burkina Faso in October 2019 and

February 2020, a review of the progress made in the four institutes was made by QAS during the course of 2021. QAS also participated in virtual workshops under the IP Key Latin America and the IP Key China programmes, on how to perform DUS testing in a reliable independent manner, bearing in mind possible conflicts of interest.

Table 2: List of QAS qualified technical experts for the 2019-2022 cycle

Technical expert		Organisation	Member State	Crop sector	Already a technical expert in 2015-2018
Bašta	Ľubomír	Central Controlling and Testing Institute in Agriculture (UKSUP)	SK	agricultural	Yes
Bimova	Pavla	Central Institute for Supervising and Testing in Agriculture (ÚKZÚZ)	CZ	agricultural	No
Bonthuis	Henk	Retired	NL	agricultural	Yes
Bravi	Romana	CREA - Plant Protection and Certification (DC) Research Centre	ΙΤ	vegetable	No
Cechova	Lydie	ÚKZÚZ	CZ	agricultural	No
Chatzigeorgiou	Alexandra	Ministry of Rural Development and Food	EL	agricultural, vegetable	Yes
Christien	Stéphanie	GEVES	FR	ornamental, vegetable	No
Corbel	Anne-Lise	GEVES	FR	agricultural	Yes
Corsi	Giovanni	CREA-DC	IT	agricultural	No
de Greef	Henk	Retired	NL	ornamental, vegetable	Yes
De Salvador	Flavio Roberto	Retired	IT	fruit	No
Diaz Morant	Miguel	Spanish Plant Variety Office (OEVV)	ES	agricultural	Yes
Dimitrov	Diliyan	Executive Agency for Variety Testing, Field Inspection and Seed Control	BG	agricultural, vegetable	No
Dugalic	Ivana	Croatian Centre for Agriculture, Food and Rural Affairs	HR	agricultural	Yes
Escolano García	Antonio	OEW	ES	agricultural, vegetable	Yes
Giulini	Anna	CREA-DC	IT	agricultural	No
Haegens	Raoul	Naktuinbouw	NL	ornamental, vegetable	No
Hoffman	Marco	Naktuinbouw	NL	fruit, ornamental	No
Kowalczyk	Bogna	Coboru	PL	agricultural, vegetable	Yes
Lawaetz	Erik	Tystofte Foundation	DK	agricultural	No
Leclair	Clarisse	GEVES	FR	agricultural	Yes
Márkné Déak	Szilvia	NÉBIH	HU	fruit, ornamental	No
Menne	Andrea	BSA	DE	ornamental	Yes
Miceli	Claudia	CREA-DC	IT	agricultural	No
Riemer	Karin	BSA	DE	agricultural, ornamental	Yes
Schulte	Erik	BSA	DE	fruit	Yes

Technical expert		Organisation	Member State	Crop sector	Already a technical expert in 2015-2018
Sicard	Georges	GEVES	FR	agricultural, vegetable	No
Szani	Zsolt	NÉBIH	HU	agricultural, fruit	Yes
Taferner-Kriegl	Jutta	AGES	AT	agricultural	Yes
Tams	Swenja	BSA	DE	agricultural, fruit, ornamental, vegetable	Yes
Titone	Patrizia	CREA-DC	IT	agricultural	No
Urquia Fernandez	Nuria	OEVV	ES	fruit	No
van Dijk	Amanda	Naktuinbouw	NL	ornamental, vegetable	No
van Leeuwen	Marian	Naktuinbouw	NL	vegetable	No

7 RESEARCH AND DEVELOPMENTS PROJECTS

The purpose of this section is to provide updated information on R & D activities; on new candidate projects, projects underway, and follow-up measures taken in 2020 on projects already concluded.

7.1. The new CPVO R & D strategy 2021-2025

A new R & D strategy for the period 2021-2025 had been adopted by the CPVO's Administrative Council in April 2021.

In essence the underlying principle of the previous R & D strategy which is ensuring the co-funding for applied research where the results can be used and implemented immediately, has been maintained in the new strategy. This allows to reach the objectives and to achieve the strategic goals of the CPVO.

In addition, the new strategy contains an extension of scope. The scope extension refers to the involvement of the CPVO in the EU Commissions R & D programmes under the Horizon Europe framework. By doing so the new strategy attempts to create a link with the Farm to Fork strategy and the EU Green Deal. Such involvement is limited to the CPVO's field of competence. Any CPVO engagement in the Horizon Europe programme will be assessed in close cooperation with the EU Commission.

The CPVO R & D strategy 2021-2025 is available on the CPVO website under: https://cpvo.europa.eu/sites/default/files/documents/techreports/general/DOC-AC-2021-1-10-Annex_2_R_and_D_Strategy_2021_2025.pdf.

7.2. Situation as regards candidate R & D projects

In 2021 two new projects were approved for co-funding and will start in 2022.

'Harnessing molecular data to support DUS testing in ornamentals: a case-study on Hydrangea.'

The project is coordinated by the Groupe d'Étude et de contrôle des Variétés et des Semences (GEVES, FR) with Bundessortenamt (BSA, DE) as well as Institut National de Recherche pour l'Agriculture l'Alimentation et l'Environnement (INRAE, FR), Genetics and Diversity of Ornamental Plants, Institut de Recherche en Horticulture et Semences (GDO-IRHS, FR) as partners.

The objective of the project is to develop an optimal molecular toolset that associates neutral and gene-specific markers within a single framework to improve the management of the reference collection in Hydrangeas. By combining neutral markers and markers linked to characteristics of interest and subject to selection, one will be able to structure

better the reference collection according to important DUS characteristics. This is an innovative approach, as until now molecular marker sets used to assist with DUS examinations comprise either only neutral or gene-specific markers. This set of markers will be used to build a library of molecular profiles for the reference collection that will allow a more efficient selection of reference varieties to compare to candidates and secure field trials by checking the varietal identity of cuttings prepared from the collection before starting DUS examinations.

The project has a duration of 18 months, and the results are expected in 2023.

'Updating DUS resistance tests according to pests' evolution: Setting up resistance tests to ToBRFV for tomato and pepper and improvement of resistance test melon/Aphis gossypii.'

The project is coordinated by GEVES (FR) with the EOs Naktuinbouw (NL), INIA (ES), CREA (IT), the breeding companies BASF, Bayer, Enza Zaden, Gautier Semences, HM Clause, Rijk Zwaan, Sakata, Takii, Vilmorin as well as the Research institution INRAE as partners.

The objectives of this project are:

- To develop for ToBRFV a system usable for DUS of tomato and pepper by biotest and biomolecular methods.
- To adapt the existing biotest of evaluation of melon resistance to Aphis gossypii to the predominant pathotypes and symptoms observed and to validate the use of a biomolecular method.

The project has a duration of 36 months, and the results are expected in 2024.

7.3. Situation as regards ongoing projects

'Cannabis sativa L.'

Naktuinbouw is coordinator for the project called "Development of a single-nucleotide polymorphism (SNP) marker set in *Cannabis sativa* L. to support DUS testing" with the National Food Chain Safety Office (NÉBIH, HU) as partner.

Applications for *Cannabis sativa* L. varieties are increasing steadily, particularly those bred for pharmaceutical use. It is particularly demanding both in terms of time and money to import plant material for DUS testing of pharmaceutical varieties, which creates reluctance of titleholders to submit reference varieties. This project aims at continuing research work already undertaken by Naktuinbouw by identifying a SNP marker set for Cannabis. Subsequently to this work, in a follow up project, a database will be setup which will broaden and maintain a reference collection for the use of selection of reference varieties in the growing trial under UPOV model 2. Potentially similar varieties will then be included

into the growing trial for a side-by-side comparison which is carried out on the phenotype. The project started in 2020 and the duration is of 24 months.



Cannabis sativa L.

'Harmorescoll'

Harmorescoll is aimed at setting up, at European level, a coordinated system to give information to interested parties on access to reference material for performing disease tests for DUS purposes according to the CPVO protocols and UPOV guidelines. The reference material is constituted of isolates, controls and differentials. The project covers disease resistances which are part of the DUS protocols. Previous R & D projects showed that harmonisation is one aspect that helps to improve the system and efficiency of the DUS testing.

Co-working amongst EOs and seed companies affiliated with Euroseeds is key in this project. After the end of the project, funding and sustainable maintenance is planned on a self-financing basis.

The project is coordinated by GEVES and Naktuinbouw. It started in 2020 and is scheduled for 3 years.

'Apple'

The project "Developing molecular markers allowing the distinction of apple mutants (sports) aims at increasing the efficiency and reliability of DUS testing of apple mutants, by identifying markers allowing the molecular characterisation of mutants. The project is coordinated by INRAE (FR) with GEVES (FR) as partner. In the frame of a 3-year project, the assessment of the genetic and epigenetic changes that occur in Gala mutants is analysed

with the objective to link them to the phenotype. Phenotyping is also an important part of this project which aims at describing and identifying varieties on the basis of images of fruits recorded automatically from conveyer machines.

'Tomato'

The project entitled "International validation of a SNP set to determine genetic distances for the management of tomato reference collection" was agreed for co-funding in February 2019. It should last 30 months. The project aims at validating between all examination offices entrusted for tomato (Naktuinbouw (NAKT), GEVES, Research Centre for Cultivar Testing (Coboru), NÉBIH, INIA, DGAV and CREA) a set of markers adapted to the management of the reference collections in the framework of UPOV Model 2 following the "French Bean" approach. If successful, a follow-up project could be built for the characterisation of the whole collections. The coordination is ensured by Naktuinbouw. The Beijing Sub-Center for DUS testing (CAAS) in China as well as the Korean Seed & Variety Service from the Republic of Korea and the Center for Seeds and Seedlings, NARO (NCSS) in Japan are involved and will participate in the project on their own funding. Euroseeds is also partner to the project.

All European and Asian partners will test the selected SNP markers on a common set of varieties and on a set of varieties from their own country. For the common set, seeds will be sent by each partner to the Naktuinbouw that will then send back deoxyribonucleic acid (DNA) extracts to all partners. A specific agreement defining the conditions of access to these materials have been signed by the consortium of partners and consents have been requested to the owners of all the varieties concerned. This last step took more time than expected and an extension of the end of the project is foreseen.

'Oilseed rape'

Based on a first project called "Test of the potential use of SNPs markers on oilseed rape varieties" this follow up project called "Developing a strategy to apply SNP molecular markers in the framework of winter oil seed rape DUS testing" was approved in March 2019 for a duration of 24 months.

In the first project, GEVES (FR) and NIAB (UK) selected and tested on different matrices a set of 500 SNPs to design reliable KasPAR assays and confirmed the possibility to reliably use bulk samples of seeds in rapeseed.

In this project they continue the work to produce large and consistent molecular data on a wide number of winter oilseed rape (WOSR) varieties in order to reach an optimised SNP set. In collaboration with Germany, existing UPOV models and newly developed ones will be tested to use these markers for DUS.

The approaches will be tested on the two different testing systems GAIA in France and Combined over year (COY) in Germany. The final results will be presented and discussed

with experts from all entrusted examination offices which were also partners to the pre-project. If the results are satisfying, a second follow up project would extend the genotyping to the whole collection and aim to validate and to apply the model chosen in the field. That implementation phase would include all entrusted EOs.

'DURDUS tools - Integration of molecular data into DUS testing in durum wheat'

The project DURDUS tools is coordinated by the Austrian Agency for Health and Food Safety (AGES) and partners in the project are the EOs INIA-OEW (ES) CREA-DC (Italy) NÉBIH (HU) as well as Euroseeds. It is a follow-up of the DURDUS project which aimed at:

- setting up a centralised genotyping procedure using microarray data from a service provider in Austria to describe the genetic diversity of the reference collections of all entrusted EOs,
- defining a common threshold to use genetic distances for the management of these collections.

Divergence of opinions on the genetic threshold and individual strategic decisions regarding molecular tools led to a modification of the consortium of partners (GEVES did not wish to be part of the follow-up). The DURDUS tools project is dedicated to consolidating the choice of the threshold and to set up a common online molecular database managed by AGES and an online interface with a press-button genetic distance calculation tool allowing the partners to select comparators for the field without handling any molecular profiles. This system will be tested by the participating EOs when setting up their routine DUS growing trials. The project should last 2 years, the final report being expected in January 2023.

7.4. Finalised research and development projects

'Melon'

This project had been approved in December 2017 and was supposed to have a duration of 2 years starting as from mid-2018. The coordinator requested a delay of one year (without additional financing) postponing the end of the project to March 2021.

The project was coordinated by Naktuinbouw (NL), with as project partners: GEVES (FR), INIA/OEVV (ES), UKSUP (SK) and DGAV (PT). The final report was received at the end of May 2021 in respect of the contractual terms of the grant agreement.

The objective was to set up a common database containing variety descriptions and photos stored within all of the CPVO's entrusted examination offices for melon. As the data was not harmonised between examination offices, the database will not directly be used to select the reference varieties to compare to the candidates but will facilitate the

identification of the available reference materials and their maintainers. The database is now operational and was used by all partners for the first time this year.



'Durum wheat - Durdus'

This project started in 2018 and ended in April 2021. The objective was to combine genotypic and phenotypic data to optimise the reference collection management by investigating the use of SNP markers of a commercial DNA chip. The coordinator was AGES (AU). Project partners were INIA (ES); GEVES (FR); CREA-SCS (IT) and NÉBIH (HU). Based on the results of the DURDUS field trials, it was concluded that a genetic distance between a candidate variety and a reference variety higher than 0,32 is a good indicator for distinctness. However, this preliminary conclusion on the threshold was challenged when considering the results of the pairwise comparisons of the 2019 to 2020 DUS trials. To find a molecular threshold with a good compromise between safety and field savings, this issue needs further consideration. The partner EOs involved in the follow up project (DURDUS tools) will continue their investigations.

7.5. The CPVO as a partner in the Horizon 2020 **Invite project**

7.5.1. Introduction

Invite (INnovations in plant Varlety Testing in Europe), is one of the two laureate projects of the call SFS-29-2018 "Innovations in plant variety testing" of the Horizon 2020 program. It aims at improving efficiency of variety testing and availability of information to stakeholders on variety performances under diversified production conditions and on biotic and abiotic stresses for 10 crops (seven "model" crops: maize, wheat, rye grass, sunflower, potato, tomato, apple and three "application crops": lucerne, soybean, rapeseed).

It addresses DUS and performance testing in a balanced way and intends to maximise synergies between them through related activities based on phenotyping, genotyping, modelling and database management.

The Consortium includes 29 partners from the areas of research, breeding, DUS examination and performance testing. The total amount awarded is about 8 million euros to be spent in a period of 5 years starting from 1 July 2019. CPVO will not receive any funding.

Inside the consortium, CPVO supports all tasks of the project by facilitating the exchanges between breeders, scientists and EOs and contributing to the respect of Examination Offices' expectations and needs. CPVO has also the role of co-leader of WP5 whose major objective is the testing and implementation of new tools by EOs. Finally, the CPVO is in charge of managing all issues related to the access to historical raw data and reference materials held by the examination offices.

In collaboration with Euroseeds, the work package leaders and the participating EOs, the CPVO designed an agreement to frame the access to these data and materials by the scientific partners of Invite's consortium. This agreement describes the procedures to follow by the EOs for:

- getting individual consents from the breeders owning the concerned varieties (including a template of consent letter),
- encoding variety names,
- · managing validated data on a data sharing system,
- exchanging samples of reference material (with a template of material transfer agreement (MTA))

7.5.2. New developments

In 2021, based on the individual consents obtained from the breeders by the participating EOs, CPVO supported the definition of the encoding keys for the authorised varieties and the coordination of the data extraction.

The campaign of requests for consents from the breeders was very successful. Depending on the number of species concerned, each of the 10 partner EOs sent letters to 22 to 82 breeding companies and got authorizations for at least one category of use (DUS/VCU/seeds/genotyping) for at least one variety from 55 to 85% of them. For the 10 species together, EOs received in total authorisations (for at least one category of a minimum of use) for about 9 500 varieties, representing around 75% of the varieties for which a request had been placed. Among these 9 500 individual authorisations, some of them had been requested by different EOs for the same varieties. This option had been chosen in the agreement in order for each breeder to know both from what country and for what varieties he would be given authorisations. After identifying the redundancies, it appeared that Invite got authorisations for about 6 800 different varieties tested by one to six different EOs. This level of redundancy (around 30% of varieties with more than one

testing place) is a very good thing to allow the development of the models of WP4. Data from the post-registration (for which no consent was required) will also contribute to the set available to WP4.

The high success rate of the campaign which requested tremendous efforts (without any dedicated budget) from the EOs, demonstrates their involvement into the project. It also shows the interest of Invite's objectives for the breeders, the efficiency of the communication thanks to the support of Euroseeds and of reputable personalities of the breeding world, and the satisfactory conditions of confidentiality proposed in the agreement on access to data and material. In this process, CPVO played a pivotal role much in line with its mission of support to the seed chain.

In the same vein, the CPVO provided support to the discussions with the breeders being asked to provide commercial seed lots for Invite's wheat and maize trial networks (meetings, cover letter and MTA).

The first review of the project by external experts missioned by the Commission took place in June 2021. the CPVO contributed to the presentations and the discussions that took place during the process. The progress described in the periodic technical report (covering the first 18 months of the project from 1 July 2019 (M1) to 31 December 2020 (M18)) were considered very positively: "Invite project is very well managed and the procedures regarding technical activities, data management, dissemination and exploitation, and other operational activities are clearly defined. Reporting documents are very clear and detailed".

Despite the delay due to the COVID-19 pandemic and the negotiations with breeders for access to historical data and reference material, Invite has produced 17 Deliverables of the 19 expected during this period and achieved 23 on the 32 Milestones planned in the deed of agreement. An extension of 6 months of the end of the project is proposed by the coordinator to complete all the planned tasks. This request was considered by the reviewers as consistent with the state of activities and will be placed after the vote of the general assembly before the end of this year.

The collaboration with InnoVar (the second laureate consortium of the SFS-29-2018 call, which focuses on the development of a machine learning approach for the optimisation of variety testing in wheat) continued, with a focus on the setting of common trials for wheat. Representatives from InnoVar were invited to attend Invite's second annual meeting by video-conference in June 2021.

8. BUDGET

8.1. Out-turn

The net out-turn for the year was approximately EUR 2.12 million positive, a significant increase compared to the previous year showing a net out-turn of EUR 0.21 million negative.

The budget out-turn for 2021 significantly increased compared to 2020. Receipts increased in 2021 and there was quite a significant decrease in expenditure. The decrease in expenditure is mainly due to the change in approach of invoicing and payment with an EO which availed of the "upfront payment" option agreed in the AC in 2020 and in 2021, the table 3 shows a return to normal.

Table 3

Net out-turn for the year 2021	(million EUR)
Budgetary revenue (a)	+ 19.37
Budgetary expenses (b)	+ 17.33
Budgetary out-turn (c) = $(a) - (b)$	+ 2.04
Non-budgetary receipts (d)	+ 0.08
Net out-turn for the budgetary year 2021 (e) = $(c) + (d)$	+ 2.12

8.2. Revenue

The CPVO's revenue comprises various fees paid by applicants for CPVR and holders of CPVR, other revenue (administrative operations), and income from interest on bank accounts. The total revenue collected in 2021 was EUR 19.37 million.

Table 4

	Variation (%)	2021 (million EUR)	2020 (million EUR)
Fees	+ 5.76	19.20	18.15
Bank interest	+ 653.66	0.12	0.02
Other revenue	+ 81.86	0.05	0.03
Total revenue	+ 6.42	19.37	18.20

The total fees received in 2021 amounts to EUR 19.20 million, representing an increase of 5.76 % in comparison to the previous year. Annual fees increased modestly in line with the increase in the number of CPVR(s) in force. There was a higher level of terminations of rights in 2021 than in previous years. The net increase in rights in force (new titles minus terminations of rights) was 573 in 2021 compared to 782 in 2020. We are witnessing a natural expiry of protection for some titles and the level of titles in force may plateau in the near future. Examination fees increased in line with a high number of applications for the year, and there was a slight drop in other fees.



The increase of 81.86 % in the other revenue comes from reimbursements received from a losing party on a court case, reimbursement from the French tax services (taxes on buildings) and also from reimbursements from suppliers for cancelled orders due to sanitary measure against COVID-19 pandemic.

Bank interest continued to fall with rates at an extremely low level; furthermore, the CPVO does not accept negative interests. However, in 2021 a financial investment came to an end which generated an interesting return of more than EUR 100 thousand.

8.3. Expenditure

In 2021, the total amount of recorded expenditure and commitments carried over was EUR 17.33 million, compared with EUR 18.54 million in 2020.

Table 5

	Variation (%)	2021 (million EUR)	2020 (million EUR)
Staff expenditure	+ 1.82	7.76	7.62
Administrative expenditure	+ 19.21	1.49	1.25
Operational expenditure	- 16.39	8.08	9.67
Total expenditure	- 6.50	17.33	18.54

The salary grid for the staff of the CPVO, being governed by the levels set by the Council of the EU, is also subject to changes in line with inflation and career progression so the payment will continue to slightly increase. A significant decrease in spending on travel

expenses was due to the cancellation of travels respecting the sanitary measure against COVID-19 pandemic.

The administrative expenditure significantly increased by 19.21% in 2021 compared to 2020. There was an increase in IT expenses equipment for purchases of new IT hardware. For meetings, some travels had been possible during the year, and for audits, the CPVO decided to conduct an evaluation on cyber-security risks.

Operational expenditure consists mainly of remuneration for EOs. The significant decrease by 16.39 % in lower payments for examination fees has already been mentioned above about the impact of the "up-front payment" that was put in place in 2020 (shift in payments upfront instead of at the end of growing periods). This caused a once-off increase in payments in 2020 and payments returned to a normal level in 2021. In addition, the execution level of payments on R & D projects was lower than expected due to delays in receiving reports – these amounts will fall due in 2022 and beyond.

8.4. Conclusion

The net result, in 2021, significantly increased compared to 2020 due to a combined increase in receipts and decrease in expenditures, as expected in line with the new up-front payment option that the EOs can exercise. In 2020, "upfront payment" as a payment option has been put in place impacting a once off increase of payment for examinations. There was a return to normal levels of examination payments in 2021.

9. DEVELOPMENTS IN THE SYSTEM

9.1. Regulatory

9.1.1. Extension of protection period for certain species

On 15 November 2021 Regulation (EU) 2021/1873 of the European Parliament and of the Council of 20 October 2021 on the extension of the term of the Community plant variety rights for varieties of the species *Asparagus officinalis* L. and of the species groups flower bulbs, woody small fruits and woody ornamentals, entered into force, extending the terms of protection for the mentioned species of 5 years (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2021.378.01.0001.01.ENG&toc=OJ%3AL%3A2021%3A378% 3ATOC).

9.2. Technical

9.2.1. Applications for Community plant variety protection

In 2021 the CPVO received 3 480 applications for Community plant variety protection (PVP), which represents an increase of 2 % compared to the previous year. Figure 1 shows the evolution of the number of applications received by the CPVO (all figures are based on the date of arrival of the application documents at the CPVO). For the last 5 years the application numbers have stabilised on this level.

Figure 1 Evolution of the annual number of applications for Community plant variety protection (2012-2021)

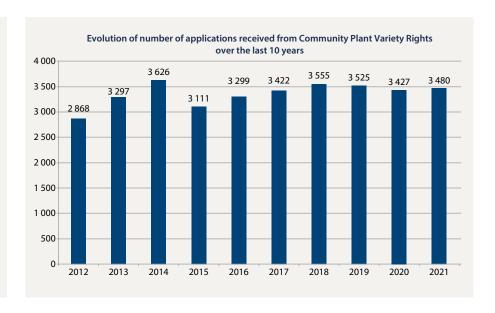
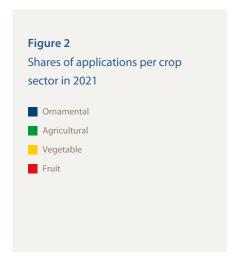


Figure 2 represents the shares of the crop sectors in relation to the number of applications received in 2021.



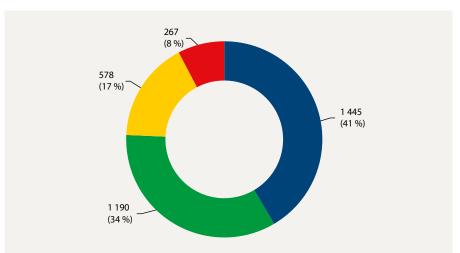
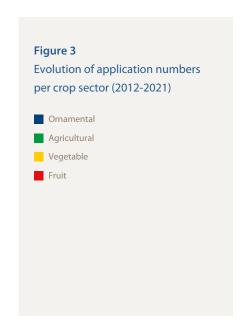
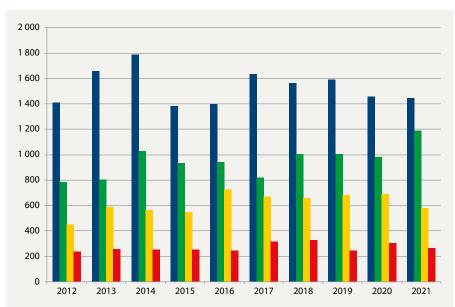


Figure 3 shows the evolution of the number of applications per crop sector since 2012. Despite the fact that the total number of applications shows only minor variation from year to year, the variation within the four crop sectors may be more important. In 2021, the CPVO observed a decrease in application numbers in the vegetable sector – 110 applications (-15.9 %), in the fruit sector with -36 applications (-11.9%), and in the ornamental sector with – 13 applications (-0.9 %), whereas the agricultural sector showed an increase in the application number with + 212 applications (+ 21.7 %).





Applicants

In 2021, 653 applicants filed applications for CPVRs, 2 more than in 2020. The following tables list, for each crop sector, the 15 most frequent users of the Community system and their respective numbers of applications filed in 2021. These top 15 applicants have a relative share of applications ranging, similarly to last year, from 87% for vegetables, 64% for agricultural and 38 % for fruit species, to as little as 36 % for ornamental species. This range not only reflects the degree of concentration in breeding, which is particularly advanced in the vegetable sector, but also shows that, in the case of ornamentals, a great number of 'small' breeders are in business and seeking protection for their varieties. The figures do not take into account possible controlling agreements between companies; the actual level of concentration may thus be higher.

Table 6: Agricultural sector

Top 15 applicants	Country	Number of applications in 2021
Pioneer Overseas Corporation	United States	166
RAGT 2n S.A.S.	France	95
KWS SAAT SE & Co. KGaA	Germany	93
Syngenta Participations AG	Switzerland	65
Deutsche Saatveredelung AG	Germany	54
Pioneer Hi-Bred International Inc.	United States	50
Limagrain Europe S.A.S.	France	40
Monsanto Technology LLC	United States	32
Syngenta Crop Protection AG	Switzerland	29
Lidea France S.A.S.	France	29
Marcel de Wit	Netherlands	27
Norddeutsche Pflanzenzucht Hans-Georg Lembke KG	Germany	26
Mas Seeds S.A.	France	18
Soltis S.A.S.	France	18
Stephanie Franck	Germany	17
Total		759

 Table 7: Vegetable sector

Top 15 applicants	Country	Number of applications in 2021
Rijk Zwaan Zaadteelt en Zaadhandel B.V.	Netherlands	95
Syngenta Crop Protection AG	Switzerland	89
Monsanto Vegetable IP Management B.V.	Netherlands	77
Enza Zaden Beheer B.V.	Netherlands	48
Nunhems B.V.	Netherlands	40
Vilmorin-Mikado S.A.S.	France	31
HM. Clause S.A.S.	France	27
Bejo Zaden B.V.	Netherlands	26
De Groot en Slot B.V.	Netherlands	14
Institut National de Recherche pour l'Agriculture l'Alimentation et l'Environnement (INRAE)	France	12
Agri-Obtentions S.A.	France	12
Sakata Vegetables Europe S.A.S.	France	10
Sur Seeds S.L.	Spain	9
Hazera Seeds B.V.	Netherlands	8
RAGT 2n S.A.S.	France	6
Total		504

Table 8: Fruit sector

Top 15 applicants	Country	Number of applications in 2021
AC Fruit - Association Création Fruitière S.A.S.	France	15
Driscoll's Inc.	United States	8
PSB Produccion Vegetal S.L.	Spain	8
CREA	Italy	8
Asparagus Beheer B.V.	Netherlands	7
C.I.V Consorzio Italiano Vivaisti - Società Consortile a r.l.	Italy	6
Rústicas del Guadalquivir S.L.	Spain	6
Institut National de Recherche pour l'Agriculture l'Alimentation et l'Environnement (INRAE)	France	6
Agro Selections Fruits S.A.S.	France	6
Fresh Forward Holding B.V.	Netherlands	6
Viveros Provedo S.A.	Spain	6
Plantas de Navarra S.A. (PLANASA) - Sociedad Unipersonal	Spain	5
The United States of America as represented by the Secretary of Agriculture	United States	5
International Fruit Genetics LLC	United States	5
Rolfe Nominees Pty Ltd.	Australia	5
Total		102

Table 9: Ornamental sector

Top 15 applicants	Country	Number of applications in 2021
Dümmen Group B.V.	Netherlands	92
Anthura B.V.	Netherlands	71
Klemm + Sohn GmbH & Co. KG	Germany	38
Ball Horticultural Company	United States	32
Piet Schreurs Holding B.V.	Netherlands	31
Walters Gardens Inc.	United States	30
NovoAmi B.V.	Netherlands	30
Van Zanten Breeding B.V.	Netherlands	29
Floricultura B.V.	Netherlands	26
Syngenta Crop Protection AG	Switzerland	26
Florensis B.V.	Netherlands	26
Poulsen Roser A/S	Denmark	25
Vletter & Den Haan Beheer B.V.	Netherlands	24
Rosen Tantau KG	Germany	23
Dekker Breeding B.V.	Netherlands	23
Total		526

Applicants from outside the EU must appoint a representative with a registered office or $domicile\ within\ the\ EU\ to\ handle\ their\ applications.\ Sometimes,\ mother\ companies\ located$ outside the EU appoint their daughter company in the EU; this is the case for Pioneer or Syngenta. EU applicants do not have such an obligation; however, some of them prefer to outsource the application procedure to an external agent. In 2021, 1 625 applications (46.7%) were filed by 160 procedural representatives. The following table lists the 15 most active procedural representatives for 2021, having submitted 1047 applications.



Table 10

Name of procedural representative	Country	Number of applications in 2021
Royalty Administration International C.V.	Netherlands	242
Pioneer Génétique S.A.R.L.	France	196
Syngenta Seeds B.V.	Netherlands	120
Syngenta France S.A.S.	France	94
Reinhild Elligsen	Germany	65
Ronald Houtman Sortimentsadvies	Netherlands	62
Plantipp B.V.	Netherlands	48
Hortis Holland B.V.	Netherlands	35
Ten Hoopen Jonker Fresco - Attorneys at Law	Netherlands	34
Deutsche Saatgutgesellschaft m.b.H. Berlin	Germany	30
Bayer Seeds S.A.S.	France	28
Limagrain Europe S.A.S.	France	26
Agri-Obtentions S.A.	France	24
Star Fruits Diffusion S.A.S.	France	22
Andreas Gertz	Germany	21
Total		1 047

9.2.1.1. Ornamental species

With 41 % of the applications received in 2021, ornamentals continue to represent the largest group of applications filed for CPVRs, with virtually the same number as in the previous year.

A particularity of ornamentals is the great diversity of species. In all years, there were for many of them a rather low number of applications per species.

Table 11: Number of applications received per year for all ornamental species since 2017, with a total covering 1995-2021

	2017	2018	2019	2020	2021	Total (1995-2021)
All ornamental species	1 629	1 564	1 592	1 458	1 445	40 077

Table 12 shows the 10 most important ornamental crops over the last 5 years (the term 'importance' is always used in this text to refer to the number of applications received). Changes in the importance of most of these crops seem to be rather accidental. Roses and *Phalaenopsis* were by far the most important species in 2021.

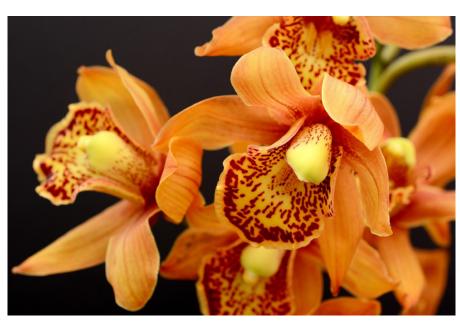
Table 12: Number of applications received for the 10 most important ornamental species groups from 2017 to 2021, with a total covering 1995-2021

Species	2017	2018	2019	2020	2021	Total (1995-2021)
Rosa L.	169	242	175	174	168	4 970
Chrysanthemum L.	148	140	121	78	83	3 906
Calibrachoa Llave & Lex. and Petunia Juss.	104	78	50	78	68	1 715
<i>Phalaenopsis</i> Blume and x <i>Doritaenopsis</i> hort.	134	112	153	108	130	1 614
Lilium L.	36	35	21	14	36	1 371
Gerbera L.	30	54	44	18	29	1 241
Dianthus L.	60	35	40	48	38	1 141
Pelargonium L'Hér. ex Aiton	15	36	39	46	25	1 084
Impatiens L.	12	12	16	12	9	1 015
Anthurium Schott	25	15	30	22	13	874
Total	733	759	689	598	599	

The CPVO may base its decision to grant CPVRs on a technical examination carried out under a previous application for either PBR or national listing and where the DUS examination has been carried out at an entrusted EO. Such a takeover of reports concerns less than 5 % of ornamentals, which is a considerably lower percentage than for the vegetable or agricultural sectors and is due to the absence of any requirement for listing before commercialising ornamental varieties.







Phalaenopsis Blume and x Doritaenopsis hort.

9.2.1.2. Agricultural species

The year 2021 showed a substantial increase (22%) of applications in comparison with 2020. In 2021 agricultural varieties represented 34 % of all applications.

Table 13 shows the number of applications received per year over all agricultural species since 2017, as well as the total figure for the years 1995 to 2021.

Table 13: Number of applications received per year for all agricultural species since 2017, with a total covering 1995-2021

	2017	2018	2019	2020	2021	Total (1995-2021)
All agricultural species	816	1 007	1 004	978	1190	19 283

Table 14 shows the number of applications for the 10 most important agricultural species for the last 5 years.

Table 14: Number of applications of the 10 most important agricultural species from 2017 to 2021, with a total covering 1995-2021

Species 2017 2018 2019 2020 2021 Total (1995-2021) Zea mays L. 177 262 229 173 325 5 508 Triticum aestivum L. emend. Fiori & Paol. 124 152 150 133 124 2 431 Brassica napus L. emend. Metzg. 94 103 120 149 92 1 921 Solanum tuberosum L. 71 84 68 72 72 1 877 Hordeum vulgare L. 72 93 100 75 56 1 597 Helianthus annuus L. 53 59 40 55 135 1 299 Lolium perenne L. 20 19 46 19 20 443 Triticum turgidum L. subsp. durum (Desf.) Husn. 16 22 13 25 25 402 Beta vulgaris L. ssp. vulgaris var. saccharifera Alef. (syn. Beta vulgaris L. ssp. vulgaris var. altissima Döll) 9 19 11 6 393 Cannabis sativa L. 12 44 61							
Triticum aestivum L. emend. Fiori & Paol. 124 152 150 133 124 2 431 Brassica napus L. emend. Metzg. 94 103 120 149 92 1 921 Solanum tuberosum L. 71 84 68 72 72 1 877 Hordeum vulgare L. 72 93 100 75 56 1 597 Helianthus annuus L. 53 59 40 55 135 1 299 Lolium perenne L. 20 19 46 19 20 443 Triticum turgidum L. subsp. durum (Desf.) Husn. 16 22 13 25 25 402 (Desf.) Husn. 9 19 11 6 393 saccharifera Alef. (syn. Beta vulgaris L. ssp. vulgaris var. altissima Döll) 9 19 11 6 393 Cannabis sativa L. 12 44 61 89 104 344	Species	2017	2018	2019	2020	2021	
Paol. Brassica napus L. emend. Metzg. 94 103 120 149 92 1 921 Solanum tuberosum L. 71 84 68 72 72 1 877 Hordeum vulgare L. 72 93 100 75 56 1 597 Helianthus annuus L. 53 59 40 55 135 1 299 Lolium perenne L. 20 19 46 19 20 443 Triticum turgidum L. subsp. durum (Desf.) Husn. 16 22 13 25 25 402 (Desf.) Husn. 9 19 11 6 393 saccharifera Alef. (syn. Beta vulgaris L. ssp. vulgaris var. altissima Döll) 9 19 11 6 393 Cannabis sativa L. 12 44 61 89 104 344	Zea mays L.	177	262	229	173	325	5 508
Solanum tuberosum L. 71 84 68 72 72 1877 Hordeum vulgare L. 72 93 100 75 56 1597 Helianthus annuus L. 53 59 40 55 135 1299 Lolium perenne L. 20 19 46 19 20 443 Triticum turgidum L. subsp. durum (Desf.) Husn. 16 22 13 25 25 402 Beta vulgaris L. ssp. vulgaris var. saccharifera Alef. (syn. Beta vulgaris L. ssp. vulgaris var. altissima Döll) 9 19 11 6 393 Cannabis sativa L. 12 44 61 89 104 344		124	152	150	133	124	2 431
Hordeum vulgare L. 72 93 100 75 56 1 597 Helianthus annuus L. 53 59 40 55 135 1 299 Lolium perenne L. 20 19 46 19 20 443 Triticum turgidum L. subsp. durum (Desf.) Husn. 16 22 13 25 25 402 Beta vulgaris L. ssp. vulgaris var. saccharifera Alef. (syn. Beta vulgaris L. ssp. vulgaris var. altissima Döll) 9 19 11 6 393 Cannabis sativa L. 12 44 61 89 104 344	Brassica napus L. emend. Metzg.	94	103	120	149	92	1 921
Helianthus annuus L. 53 59 40 55 135 1 299 Lolium perenne L. 20 19 46 19 20 443 Triticum turgidum L. subsp. durum (Desf.) Husn. 16 22 13 25 25 402 Beta vulgaris L. ssp. vulgaris var. saccharifera Alef. (syn. Beta vulgaris L. ssp. vulgaris var. altissima Döll) 9 19 11 6 393 Cannabis sativa L. 12 44 61 89 104 344	Solanum tuberosum L.	71	84	68	72	72	1 877
Lolium perenne L. 20 19 46 19 20 443 Triticum turgidum L. subsp. durum (Desf.) Husn. 16 22 13 25 25 402 Beta vulgaris L. ssp. vulgaris var. saccharifera Alef. (syn. Beta vulgaris L. ssp. vulgaris var. altissima Döll) 9 19 11 6 393 Cannabis sativa L. 12 44 61 89 104 344	Hordeum vulgare L.	72	93	100	75	56	1 597
Triticum turgidum L. subsp. durum 16 22 13 25 25 402 (Desf.) Husn. Beta vulgaris L. ssp. vulgaris var. ssp. vulgaris var. altissima Döll) Cannabis sativa L. 12 44 61 89 104 344	Helianthus annuus L.	53	59	40	55	135	1 299
(Desf.) Husn. Beta vulgaris L. ssp. vulgaris var. 9 19 11 6 393 saccharifera Alef. (syn. Beta vulgaris L. ssp. vulgaris var. altissima Döll) Cannabis sativa L. 12 44 61 89 104 344	Lolium perenne L.	20	19	46	19	20	443
saccharifera Alef. (syn. Beta vulgaris L. ssp. vulgaris var. altissima Döll) Cannabis sativa L. 12 44 61 89 104 344	- · · · · · · · · · · · · · · · · · · ·	16	22	13	25	25	402
	saccharifera Alef. (syn. Beta vulgaris L.	9	19		11	6	393
Total 648 857 827 801 959	Cannabis sativa L.	12	44	61	89	104	344
	Total	648	857	827	801	959	

The order of the species has remained unchanged; however, cannabis appears for the first time in the top 10 species, replacing triticale. Noticeable increases were observed in maize and sunflower.

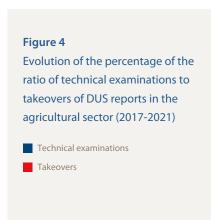
The ratio of takeover of reports to technical examinations continues on a slight upwards trend in respect of technical examinations, accounting for almost one quarter.

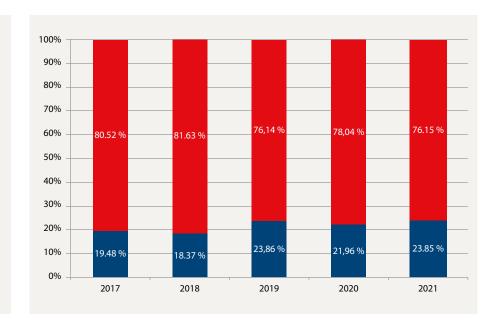




Zea mays L.

Helianthus annuus L.





9.2.1.3. **Vegetable species**

The year 2021 showed a 16% decrease in the number of applications in comparison with the previous year. Vegetable varieties represented 17 % of all applications in 2021, which is closer to the long-term average for the sector but is a departure from the rather stable level observed over the previous 5 years. The distribution of applications in vegetable species in recent years is displayed in Table 15.

Table 15: Number of applications received per year for all vegetable species since 2017, with a total covering 1995-2021

	2017	2018	2019	2020	2021	Total (1995-2021)
All vegetable species	665	659	683	688	578	11 046

Table 16 shows the number of applications for the 10 most important vegetable species for the last 5 years.

Table 16: Number of applications for the 10 most important vegetable species from 2017 to 2021, with a total covering 1995-2021

Species	2017	2018	2019	2020	2021	Total (1995-2021)
Lactuca sativa L.	183	248	180	230	166	3 090
Solanum lycopersicum L.	161	115	150	90	107	1 692
Capsicum annuum L.	47	47	61	59	44	738
Cucumis melo L.	46	30	64	47	43	622
Phaseolus vulgaris L.	11	27	12	27	20	567
Pisum sativum L.	16	28	28	27	22	539
Cucumis sativus L.	32	37	21	33	38	506
<i>Brassica oleracea</i> L. convar. <i>botrytis</i> (L.) Alef. var. botrytis	1	7	4	17	5	261
Allium cepa (Cepa group)	8	6	10	17	17	235
Spinacia oleracea L.	23	14	6	15	9	221
Total	528	559	536	562	471	







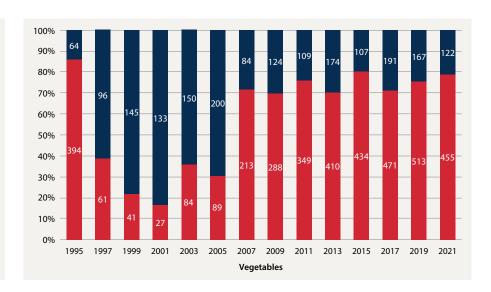
Lactuca sativa L.

For vegetable applications received in 2021, the CPVO requested 122 technical examinations to be carried out on its behalf and took over 455 technical reports from national authorities (Figure 5).

Figure 5 Evolution of the number of applications and the percentage of the ratio of technical examinations to takeovers of DUS reports in the vegetable sector (1995-2021) (every other year shown)

Technical examinations

Takeovers



9.2.1.4. **Fruit species**

The number of fruit CPVR applications decreased in 2021 by 12%. The top three species in the history of the CPVO until 2021 remained peach, strawberry and apple, the highest number of applications received in 2021 was for strawberry (48) followed by peach (37) and blueberry (31). Most applications in the fruit sector are made for 'small fruit' crops.



Vaccinium L.



Prunus persica (L.) Batsch.

Table 17: Number of applications received per year for all fruit species since 2017, with a total covering 1995-2021

	2017	2018	2019	2020	2021	Total (1995-2021)
All fruit species	312	325	246	303	267	5 094

Table 18 shows the number of applications for the 10 most important fruit species for the last 5 years.

Table 18: Number of applications for the 10 most important fruit species from 2017 to 2021, with a total covering 1995-2021

Species	2017	2018	2019	2020	2021	Total (1995-2021)
Prunus persica (L.) Batsch	52	21	34	47	37	1 080
<i>Fragaria x ananassa</i> Duchesne ex Rozier	44	37	53	48	48	791
Malus domestica Borkh.	36	27	23	28	21	623
Vitis L.	34	50	14	20	29	368
Prunus armeniaca L.	16	8	10	8	5	327
Vaccinium L.	23	42	20	37	31	299
Rubus idaeus L.	27	22	27	24	13	276
Prunus salicina Lindl.	7	7	8	7	6	155
Prunus avium (L.) L.	6	12	8	5	13	154
Rubus subg. Rubus	16	8	5	12	23	121
Total	261	234	202	236	226	4 194

9.2.1.5. Origin of the applications

Since the creation of the CPVO, applications have been received from 70 countries. Nearly every year more than one third of all applications received have originated from the Netherlands (34% in 2021), underpinning the important role of the Dutch in the breeding sector. The Netherlands is followed, quite some distance behind, by France, Germany the United States and Switzerland. Table 19 gives an overview of the number of applications received from different Member States in 2021.

Table 19: Member States from which CPVR applications were filed in 2021

Member State of main applicant	Number of applications received in 2021
Netherlands	1 192
France	478
Germany	456
Italy	147
Spain	111
Denmark	91
Belgium	37
Poland	36
Austria	25
Czech Republic	18
Finland	5
Hungary	5
Sweden	4
Greece	3
Ireland	3
Latvia	2
Slovak Republic	2
Estonia	1
Total	2 616

Table 20 shows the application number from countries outside the EU.

Table 20: Non-EU countries from which CPVR applications were filed in 2021

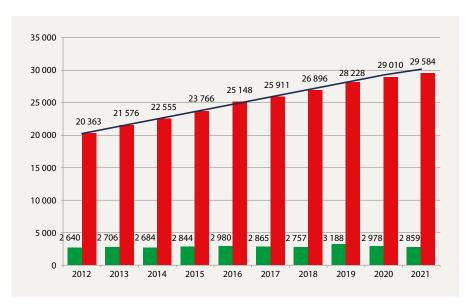
Country of main applicant	Number of applications received in 2021
United States	386
Switzerland	221
United Kingdom	53
Japan	50
Australia	35
Israel	27
Brazil	23
Taiwan	15
Canada	10
Colombia	6
Turkey	6
New Zealand	5
South Africa	5
China	4
Mexico	4
Norway	4
India	3
South Korea	2
Serbia	2
Chile	1
Ecuador	1
Uruguay	1
Total	864

9.2.2. Grants of protection

In 2021 the CPVO granted 2 859 titles for Community PVP, a drop of 4% compared to 2020, which was the third highest in 25 years. As the number of applications seems to be stabilising, one may predict stable numbers of grants issued. A detailed list of all varieties under protection (as of 31 December 2021) is published on the CPVO website in the separate annex to this report.

By the end of 2021 there were 29 584 CPVRs in force. Figure 6 shows the number of titles granted each year from 2012 to 2021 and illustrates the continuous increase in the number of varieties under protection within the Community system, which is due to the fact that the number of rights terminated is still below the number of rights granted; in the long run an equilibrium can be expected.



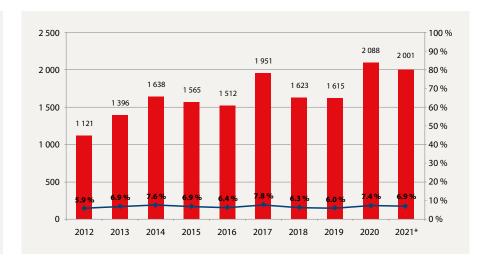


The development of the number of CPVRs in force must be seen in conjunction with the number of rights surrendered (Figure 7). The number of rights granted still greatly outweighs the number of surrenders. As older varieties are replaced by newer ones, the number of surrenders is expected to get closer to the number of grants. The regular increase in the number of surrenders is therefore not a surprise.



Number of surrenders registered

◆ Percentages of surrenders per year out of total number of rights in force on 31 December of previous year









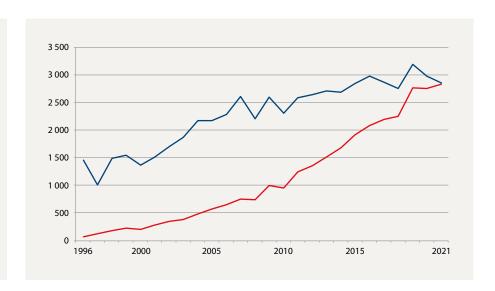
Clematis L.

Figure 8 shows the number of rights granted in the years 1996 to 2021 and those still in force on 31 December 2021. A large number of rights are surrendered within a few years after grant. In 2021 the number of surrenders decreased slightly. While remaining on a relatively high level, as in 2020, surrenders in ornamentals have actually decreased by 30% whereas those in agricultural crops have gone up by close to 60%.

Figure 8

Number of rights granted each year from 1996 to 2021 and those remaining in force on 31 December 2021 from those granted per year

- Number of rights granted
- Number of rights remaining in force



At the end of 2021, out of the 59 420 rights granted in total, 29 584 (50 %) were still in force. Table 21 illustrates that fruit varieties are generally kept protected for a longer period and that, within each crop sector, the situation varies from species to species. There might be a number of reasons for this phenomenon, such as a change in consumer preferences, breeding trends, differences in intensity of breeding activities, the time and expense required to develop new varieties or a recent boom in plant breeding.

Table 21: Percentage of granted rights that were still in force on 31 December 2021

Crop sector	Species	Proportion (%)
Agricultural		54%
	Hordeum vulgare L.	43%
	Zea mays L.	51%
	Triticum aestivum L. emend. Fiori & Paol.	53%
	Solanum tuberosum L.	58%
	Festuca rubra L.	70%
Vegetable		61%
	Cichorium endivia L.	48%
	Lactuca sativa L.	54%
	Solanum lycopersicum L.	68%
	Capsicum annuum L.	69%
	Daucus carota L.	71%
Ornamental		42%
	Gerbera L.	19%
	Chrysanthemum L.	34%
	Rosa L.	42%
	Phalaenopsis Blume & Doritaenopsis hort.	57%
	Clematis L.	79%
Fruit		73%
	Fragaria x ananassa Duch.	64%
	Prunus persica (L.) Batsch	66%
	Prunus domestica L.	71%
	Malus domestica Borkh.	74%
	Prunus avium (L.) L.	86%
Fruit	Rosa L. Phalaenopsis Blume & Doritaenopsis hort. Clematis L. Fragaria x ananassa Duch. Prunus persica (L.) Batsch Prunus domestica L. Malus domestica Borkh.	42% 57% 79% 73% 64% 66% 71% 74%







Festuca rubra L.

9.2.3. Technical examinations

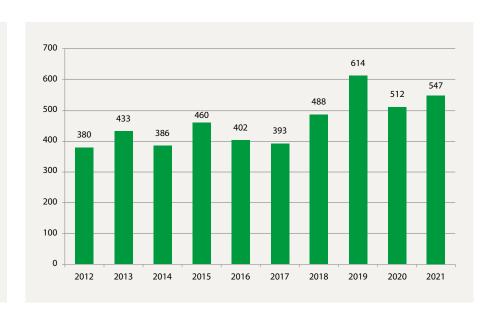
In 2021 the CPVO initiated 1 950 technical examinations. In the agricultural and vegetable sectors, a large number of technical examinations have already been carried out as part of the national listing procedure. If such a technical examination has been carried out by an entrusted EO, the CPVO can base its decision to grant CPVRs on this technical examination in the context of a national application.

9.2.3.1. Sales of reports

National PVR authorities from all over the world regularly base their decisions on applications for PVRs on technical examinations carried out on behalf of the CPVO in the framework of the international cooperation in plant variety testing.

Figure 9 illustrates the number of reports the CPVO has made available to national authorities.

Figure 9
Evolution of the number of DUS
testing reports made available to
other PVR authorities (2012-2021)



By the end of 2021 the CPVO had provided 8 289 technical reports to 61 countries. During 2021, the five countries from which most requests emanated were Ecuador, Canada, Switzerland, the Russian Federation and Serbia. In 2021, 41.2 % of requests concerned ornamental varieties, 48.3 % fruit varieties, 6.7 % agricultural varieties and 3.9 % vegetable varieties. In 2021 the CPVO processed 758 requests, which is the third highest number of requests received per year.

The CPVO has set up a flexible approach in respect of the agreed UPOV fee for making reports available. Requesting authorities can pay this fee directly to the CPVO but they can also opt for the alternative, according to which the CPVO sends the invoice to the title

holder or his procedural representative or an agent located in the country of the requesting authority. The report is always provided electronically and directly to the national authorities.

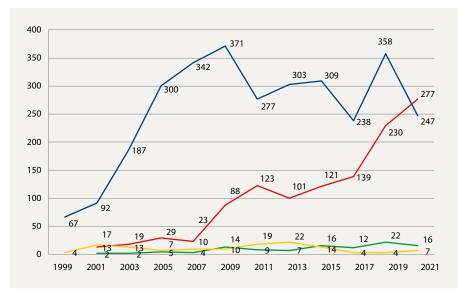
Table 22: The 10 countries that have bought the most DUS technical reports from the CPVO (1998-2021)

Country	Number of reports bought
Colombia	871
Brazil	860
Ecuador	691
Israel	604
Canada	589
Kenya	548
Switzerland	500
Turkey	354
France	343
Norway	295

Figure 10 shows the evolution per crop sector of the number of DUS reports exchanged with national PVR authorities all around the world from 1999 to 2021. The total number of requests decreased a little in 2021 compared to the previous year, and still mainly concerned the ornamental and fruit sectors. The number of sales in 2021 was also very high in these two sectors due to applications for ornamental and fruit varieties applied in multiple countries and those countries taking over the DUS report from the CPVO.

Since 1998, the CPVO DUS report of each of 16 fruit varieties has been taken over by 10 countries or more. The DUS report of the top variety (a raspberry variety) has been sold by the CPVO so far to 24 countries outside the EU.





9.2.3.2. Relations with examination offices

9.2.3.2.1. 25th annual meeting with the examination offices

In December 2021 the CPVO held its 25th annual meeting with its EOs, which was also attended by representatives from the European Commission, the UPOV and the breeders' organisations (Ciopora, Euroseeds, Plantum and ECO-PB), as well as by representatives from Switzerland and Norway as non-EU PVR authorities. The meeting was held as a video-conference. The main subjects of discussion were the following.

- Use of national protocols for CPVR applications.
- Submission of plant material.
- Prolongation of the period of protection for certain species.
- New denominations guideline.
- Revision of the Designation Agreement.
- Revision of the entrustment requirements for the 2023-2025 assessment cycle.

Furthermore, the participants were informed of the state of play of R & D projects, IT projects and the calculation of costs by the EOs.

9.2.3.2.2. Preparation of the CPVO's technical protocols

In 2021, experts from the Member States' EOs were invited to participate in drawing up or revising the following resistance test protocols (TPs) for DUS testing, which were subsequently approved by the Administrative Council.

- Agricultural Sector: Cocksfoot, quinoa, red clover, lucerne, timothy.
- Vegetable sector: wild rocket, garden rocket, lettuce and spinach
- Fruit sector: Kiwi fruit, almond, blueberry, walnut.
- Ornamental sector: Alstroemeria, Phalaenopsis, Calibrachoa, Oncidium, Ranunculus, Coreopsis, Hydrangea.

9.2.3.2.3. Crop experts meetings

A meeting of fruit experts was held by electronic means on 5 and 6 October 2021. The discussions included a number of items relating to conducting technical examinations (such as testing of apple mutation groups, organisation of blueberry testing, developments and breeding in strawberry, confirming applicants the receipt of plant material, obtaining reference varieties for DUS testing, observing in multi-annual tests certain characteristics only once or the number of plants of reference varieties to be assessed) as well as plant health issues and R & D projects.

The agricultural experts meeting took place as video-conference on 29 and 30 September 2021. In addition to the DUS technical examination-related topics and TP discussions, items such as hybrid wheat testing, observing in multi-annual tests certain

characteristics only once, replacing the FAO numbers by flowering time in maize, methods for cyclic planting in grass testing, DUS assessment of oilseed rape hybrid varieties, testing and experience of new applications for true seed potatoes in Netherlands or characteristic "Ploidy" – revision of the number of plants were on the agenda. Furthermore an update on the CPVO's R & D strategy was provided.

Also, the meeting of ornamental experts was held in form of a video-conference in October 2021. The aim of the meeting was to inform examiners of the developments in the work of the CPVO and to discuss items linked to the technical examinations (such as change in duration of DUS examinations following the transfer of examinations from the National Institute of Agricultural Botany (NIAB) (UK) to other examination office in the EU, the modification of the technical questionnaire for trees and shrubs, the adoption and publication of national test protocols by the CPVO, the prolongation of the period of protections for varieties of woody ornamentals and bulb species, additional information linked to the UPOV code to group varieties, and R & D projects conducted under the authority of examination offices). Some of the discussions held served as preparation for the annual meeting with all the EOs.

The meeting of vegetable experts was held electronically on 9 and 10 November 2021. In addition to the revision of the TPs, the group discussed several DUS matters related to the acceptance of final reports based on varieties descriptions with same notes, the proposal to draft a guidance that could allow the EO to perform only one single observation on certain characteristics for species with multi-annual testing, and the proposal to reduce the number of plants to be observed to assess the ploidy for watermelon, industrial chicory and radish. The group has also discussed the proposal of GEVES and Naktuinbouw to include more flexibility in the method to assess the characteristics of resistance, mainly related to the control varieties. Another point of the agenda aimed at recalling the need for the EO to get the plant material of protected vegetable parent line varieties for the variety collections.

9.2.3.2.4. New species

In 2021 the CPVO organised two new-species inventories. In the 2021-A procedure in May, 47 new species for which varieties have not yet been subject to an application to the CPVO were published. For 43 of them, a new EO was appointed. In October for the 2021-B procedure, 27 new species were published. For 22 of them, a new examination office was entrusted. The list of those taxa concerned is provided in Table 23.

Table 23: List of new species for which EOs were entrusted during the procedures 2021-A and 2021-B

Species name

Achillea alpina L. (syn. A. sibirica) x A. millefolium L.

Agave tuberosa (L.) Thiede & Eggli (syn. Polianthes tuberosa L.)

Allium nutans L. x A. senescens L.

Allium senescens L. subsp. montanum (Pohl) Janch. ex Soó

Alocasia lauterbachiana (Engl.) A. Hay

Alocasia micholitziana Sander

Aloysia citrodora Paláu

Amaranthus hybridus L. x A. hypochondriacus L.

Amelanchier alnifolia (Nutt.) Nutt. ex M. Roem.

Amsonia rigida Shuttlew. ex Small x A. tabernaemontana Walter

Anthurium bakeri Hook. f.

Artemisia mauiensis (A. Gray) Skottsb.

Aruncus aethusifolius (H. Lév.) Nakai x A. dioicus (Walter) Fernald

Begonia bowerae Ziesenh.

Billardiera heterophylla (LindL.) L. W. Cayzer & Crisp (syn. Sollya heterophylla LindL.)

Bouvardia triphylla Salisb.

Brassica napus L. subsp. napus var. pabularia (DC.) Alef.

Buxus sinica (Rehder & E. H. Wilson) M. Cheng

Camellia sinensis (L.) Kuntze

Citrus australasica F. MuelL. (syn. Microcitrus australasica (F. MuelL.) Swingle) x C. reticulata Blanco

Clivia miniata (LindL.) Regel

Colocasia Schott

WITH ENTRUSTMENT TYPE

Colocasia esculenta (L.) Schott x unknown species

Cornus capitata WalL. x C. kousa Burger ex Hance

Cupressus sempervirens L.

Doronicum orientale Hoffm.

Echeveria DC.

WITH ENTRUSTMENT TYPE

Echeveria harmsii J. F. Macbr. x E. setosa Rose & Purpus var. setosa x E. affinis E. Walther

Echeveria DC.

WITH ENTRUSTMENT TYPE

Echeveria. elegans Rose x E. pulidonis E. Walther x Graptopetalum filiferum (S. Watson) J. Whitehead

Echeveria DC.

WITH ENTRUSTMENT TYPE

Echeveria affinis E. Walther x E. carnicolor (Baker) É. Morren x E. elegans Rose

Echeveria DC

WITH ENTRUSTMENT TYPE

Echeveria agavoides Lem x E. elegans Rose x unkown species

Echeveria elegans Rose (syn. E. albicans) x Graptopetalum filiferum (S. Watson) J. Whitehead

Echeveria purpusiorum A. Berger x Echeveria setosa Rose & Purpus

Echeveria rosea LindL. x Echeveria setosa Rose & Purpus

Species name

Epipremnum aureum (Linden & André) G. S. Bunting

Erica cinerea L.

Euphorbia characias L. x E. dulcis L.

Euphorbia L.

WITH ENTRUSTMENT TYPE garden plants – outdoor

Fargesia rufa T. P. Yi

Ficus cyathistipula Warb.

Geogenanthus ciliatus G. Brückn.

Geranium x cantabrigiense Yeo

Heliopsis helianthoides (L.) Sweet var. scabra (Dunal) Fernald (syn. Heliopsis scabra Dunal)

Musa sikkimensis Kurz

WITH ENTRUSTMENT TYPE

ornamental

Musa x paradisiaca L. (M. acuminata Colla x M. balbisiana Colla)

Pandanus amaryllifolius Roxb.

Panicum miliaceum L.

Paulownia fortunei (Seem.) Hems L.

Paulownia fortunei (Seem.) Hems L. x P. tomentosa (Thunb.) Steud.

Philodendron wendlandii Schott

Philotheca myoporoides (DC.) Bayly (syn. Eriostemon myoporoides DC.)

Pilea cadierei Gagnep. & Guillaumin

Pinus sylvestris L.

Pistacia atlantica Desf. x P. integerrima J. L. Stewart

Pistacia vera L.

Primula elatior (L.) Hill

Sandersonia aurantiaca Hook.

Sequoiadendron giganteum (Lind L.) J. Buchholz

Sesleria heufleriana Schur

Syringa josikaea J. Jacq. ex Rchb.

Talinum paniculatum (Jacq.) Gaertn.

Vigna unguiculata (L.) Walp.

Vitis L

WITH ENTRUSTMENT TYPE

V. aestivalis Mich x. var. linsecomii (Buckley) L. H. Bailey (syn. V. linsecomii Buckley) x V. cinerea (Engelm.) Millardet var. floridana Munson (syn. V. simpsonii Munson) x V. labrusca L. x V. monticola Buckley V. rupestris Scheele x V. vinifera L.

Wisteria brachybotrys Siebold & Zucc. x W. x formosa Rehder

Wisteria x formosa Rehder

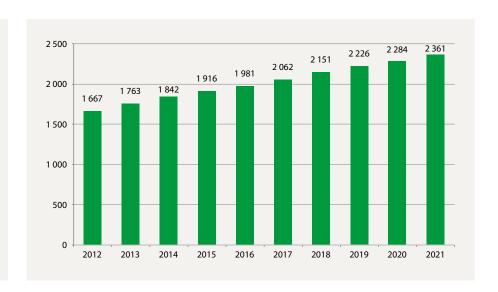
Wisteria x valderi J. Compton

x Semponium spp.

For the taxa for which no proposals have been received so far, the CPVO is exploring technical solutions, either at EU level or outside the EU, depending on the species.

Figure 11 shows the evolution of the number of taxa for which the CPVO has received applications for Community PVP since 2012.

Figure 11
Evolution of the number of botanical taxa for which the CPVO received applications (2012-2021)



9.2.4. Technical liaison officers

The CPVO tries to have a close and efficient working relationship with its EOs. Therefore, in 2002 the CPVO formalised a network of contact persons on a technical level in the Member States, the technical liaison officers. The TLOs play an important role in the CPVO's relationship with its EOs. A revision of the set-up of the TLO network was approved by the AC and the changes entered into effect from January 2016.

The role of the TLO can, in general, be defined as acting as the contact point for the CPVO at a technical level. In particular, this means the following.

- Invitations to the annual meeting with the EOs are, in the first place, addressed to the TLO
- The TLO should be the person at EO level who is in charge of distributing information of technical relevance within the EO in respect of the CPVR system (e.g. informing crop expert colleagues of conclusions from the annual meeting of the EOs).
- Technical enquiries, which are sent out by the CPVO to collect information, should be addressed to the TLOs. Examples include:
 - new species procedures, in order to prepare the proposal for the entrustment of EOs to the Administrative Council.
 - questionnaires in respect of closing dates, quality requirements and the testing of genetically modified organisms.

• For communications of a general technical nature, the CPVO contacts the TLOs first. Specific problems, such as those relating to a certain variety, may be discussed in the first instance directly between the crop expert at the EO and the relevant expert at the CPVO.

 Table 24: List of appointed TLOs (as of 31 December 2021)

Luca Aggio	CREA Centro di ricerca per la viticoltura ed enologia/Viticulture and Enology Research Centre Italy
Ľubomír Bašta	UKSUP Department of variety testing Slovakia
Pier Giacomo Bianchi	CREA-DC Italy
Alexandra Chatzigeorgiou	Hellenic Ministry of Rural Development and Food Directorate-General of Agriculture Directorate of Propagating Material of Cultivated Plant Species and Plant Genetic Resources Greece
Mihaela-Rodica Ciora	Institutului de Stat pentru Testarea si Inregistrarea Soiurilor / State Institute for Variety Testing and Registration Romania
Ana Paula Cruz de Carvalho	Direção Geral de Alimentação e Veterinária Portugal
Zoltán Csurös	NÉBIH Directorate of plant production and horticulture Hungary
David Cummins	Department of Agriculture, Food and the Marine Ireland
Maureen Delia	Ministry of sustainable development environment and climate change Seeds and other propagation material unit Plant health directorate Malta
Gerhard Deneken	Tystofte Foundation Denmark
Diliyan Dimitrov	Executive Agency for Variety Testing Field Inspection and Seed Control Bulgaria
Ivana Dugalić	Croatian Centre for Agriculture, Food and Rural Affairs Croatia
Damien Eylenbosch	Centre Wallon de Recherches Agronomiques Belgium
Barbara Fürnweger	AGES Austria
Fabio Gervasi	CREA Centro di recerca per la Olivicoltura, Frutticoltura e Agrumicoltura / Olive, Citrus and Tree Fruit Research Centre Italy

Marcin Król	Coboru Poland
Kristiaan van Laecke	Eenheid Plant – eel ten Omgeving / Plant Unit – Cultivation and Environment Belgium
Clarisse Leclair	GEVES FRANCE
Päivi Mannerkorpi	European Commission DG Health and Food Safety Belgium
Kyriacos Mina	Ministry of agriculture, natural resources and environment Agricultural research institute Cyprus
Inga Ovsjannika	State Plant Protection Service Latvia
Kaarina Paavilainen	Finnish food safety authority Finland
Ruta Pieviskiene	Ministry of agriculture Lithuanian state plant service Division of plant variety Lithuania
Andrea Povolná	ÚKZÚZ Czech Republic
Helena Rakovec	Ministry of agriculture, forestry and food Slovenia
Beate Rücker	BSA Germany
Bert Scholte	Naktuinbouw Afdeling Rassenonderzoek / Variety Testing Department Netherlands
Agra Univer	Agricultural research centre Viljandi variety testing centre Estonia
Nuria Urquía Fernández	OEW Ministerio de Agricultura, Pesca y Alimentación / Ministry of Agriculture, Fisheries and Food Spain
Marc Weyland	Agriculture technical services office Plant production service Luxembourg
Niklas Zeiner	Swedish Board of Agriculture Plant and Environment Department Plant Regulation Division Sweden

10. VARIETY DENOMINATIONS

10.1. The CPVO Variety Finder

The CPVO Variety Finder is a web application which contains information on registers of more than 70 countries with a general search tool. In 2021, the CPVO released a new redesigned version of the CPVO Variety Finder application and improved significantly the user friendliness of the tool. Users have now the possibility to adjust their setting, criteria or result lists. Search facilities have been significantly improved.

The CPVO centralises data from various registers such as Plant Breeder's Rights (PBR) offices (including the CPVO register), National plant variety listings, Plant patent registers, the EUIPO trademark register (trademarks registered in class 31) and commercial registers.

The objective is to offer a centralised search service to breeders, National Authorities and the public in general.

An efficient similarity search tool is made available to test the suitability of variety denominations.

The various contributors update the database as soon as data are officially published, and a memorandum of understanding has been signed with the UPOV to share the task of collecting data from EU Member States and non-EU countries and ensure a regular data exchange.

In total, more than 1.2 million records originating from EU and non-EU countries have been included in the Variety Finder so far. For the 15th anniversary of the Variety Finder, the CPVO gathered all contributors to the Variety Finder for a workshop where new functionalities could be presented.

The use of the Variety Finder has constantly increased over recent years.

CPVO applicants and titleholders represent the biggest group of users with more than 50 % of the tests of similarity launched.



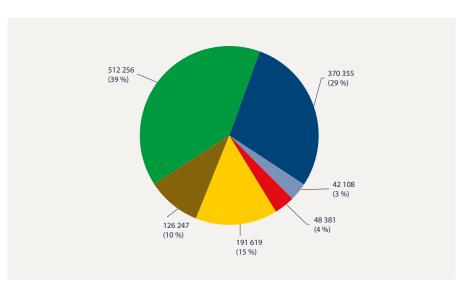


Figure 13 gives an overview of the use of key functionalities in the Variety Finder



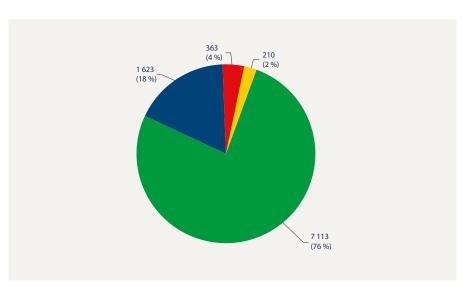
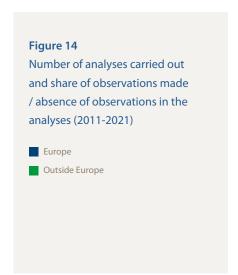
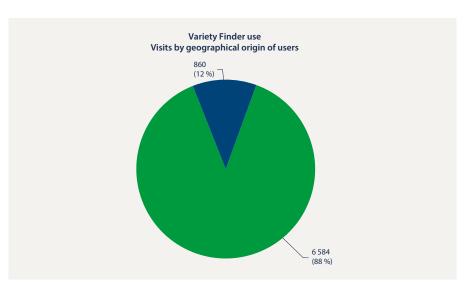


Figure 14 shows the origin of the users of the CPVO Variety Finder





The CPVO and the Directorate General for Health and Food Safety (DG SANTE) have worked intensively in 2021 on the joint project named "EU Plant Variety Portal (EU PVP)".

It aims at one unique submission for Member States that will cover information to contribute to the various databases (CPVO Variety Finder and Commission's Databases).

The EU PVP team launched a first survey targeting EU Member States on the content of the future information systems.

Results were presented and discussed during the working group meetings involving Member States in March and April 2021. Thanks to the interactions with project's stakeholders, the team delivered a new version of the content in line with stakeholders' needs and EU legislation. The content of the information system is provided in the form of a Data Dictionary.

10.2. Cooperation in denomination testing

June 2021 was marked by two major events in the denomination sector: a working group on variety denominations and a workshop on the cooperation service, which had been postponed in 2020 due to the sanitary situation linked to the COVID-19 pandemic.

The working group on variety denominations is the result of an internal reflection on the CPVO's experience with the cooperation service.

The Harmonisation of the interpretation of variety denomination rules and the centralisation of the analyses has the merit to contribute to the consistency of decisions. However, this centralisation can also have the disadvantage of limiting the diversity of opinions. It must be said that in the framework of the cooperation service, the exchanges between the CPVO and national authorities remain ad hoc exchanges, that mostly concern specific cases. The CPVO rarely receives remarks or objections from breeders concerning denominations that they consider to be in conflict with their own denominations.

In 2021, the working group was invited to discuss the explanatory notes on the guidelines on variety denominations, which were approved by the Administrative Council in 2018 and were put on hold during the revision of the Commission Regulation 637/2009 on the suitability of denominations of agricultural plant species and vegetable species.

The Administrative Council of the CPVO adopted the final version of the new guidelines on variety denominations with explanatory notes on 10 December 2021. They entered into force on 1 January 2022 together with the new Commission Implementing Regulation 2021/384.

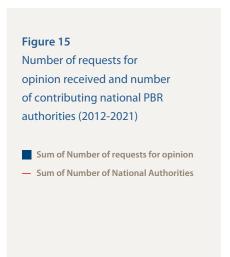
This working group on variety denominations was followed by a joint workshop gathering more than fifty users of the Variety Finder database and the cooperation service on variety denominations.

The aim of this workshop was to provide a space for discussion with users on issues related to their daily use of the cooperation service and of the database, as well as to have their feedback on the new Variety Finder and the functionalities that have been made available since December 2020.

As far as the cooperation service is concerned, this workshop was also an opportunity to recall certain principles necessary for the good functioning of the cooperation service like, for instance, the role of the reference list, which is an essential part of the cooperation service and whose quality depends on the information provided by users at the time of their request for advice.

It was also the occasion to underline the role of the breeder's reference in the identification of varieties and to recall the merit of its harmonisation in the procedures, as the experience has shown that a different breeder's reference may lead some national authorities to refuse a denomination.

It was finally the occasion to show and to explain statistics, which reflect the daily activity of the users of the cooperation service.





Except for the year 2016, the cooperation service has always shown an increase in term of requests for advice. 2021 is marked by a drop of 10 % in the number of requests for advice. The decrease is mainly related to the Brexit: in 2020, the UK was the fifth largest user of the service and the number of respective requests for advice represented about 8% of the total number of requests for advice.

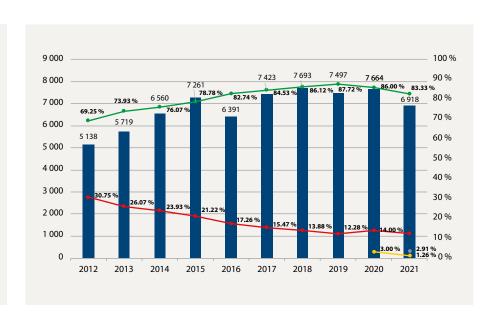
Figure 16 Number of analyses carried out and share of observations made / absence of observations in the analyses (2012-2021) Sum of Number of analyses % of Observation



% of No observation

% of Prior right

% of Condition



Until mid-November 2021, the number of observations was down compared to 2020. However, this decrease must be put into perspective as two new statuses 'Condition' and 'Prior Right' were introduced in December 2020. The aim of these new statuses is to better differentiate between denominations that are absolutely not acceptable and those that could be acceptable under certain conditions, as well as EU Trademarks. Without these two additional statuses, the number of observations would therefore represent almost 16.5% of the denominations analysed, which in reality represents an increase compared to the previous years. This increase concerns issues of similarity (identical denominations or denominations differing by only one letter) and issues related to difficulties in recognising the denomination as such.

Although the cooperation service has been integrated in the denomination testing procedures for many years, the CPVO is regularly confronted with situations, where a national authority has accepted a denomination without using the cooperation service and where, unfortunately, the CPVO gives a negative opinion to another national authority shortly afterwards or even refuses the denomination in the context of an application for EU PBR.

This is of course an undesirable situation, which can be very disadvantageous for breeders, and can lead to the creation of synonyms within the EU. The CPVO has started to work on the denominations of varieties registered in the national registers and whose denominations have not been the subject of a request for advice since the implementation of the cooperation service. The CPVO will share the results with the National authorities concerned.

The aim of this analysis is to ensure that all denominations entering the Common Catalogue have been submitted to the cooperation service.

11. INFORMATION TECHNOLOGY (IT)

Early 2021, the IT team was reorganised as a separate unit pursuing and expanding the goals of 2020 with an additional focus on governance, compliance (in particular data protection), cloud computing and cybersecurity. It was further reinforced with the recruitment of a dedicated Head of Unit and Cloud architect to help streamline IT operations and prepare the transition to the cloud.

Another key focus for 2021 was the design of a products/services IT roadmap aiming to improve estimation, prioritisation, planning, progress tracking and efficient delivery.

2021 also saw the release of new digital capabilities across many platforms (MyPVR, PVR, VarietyFinder, ...) for both internal and external stakeholders, improved infrastructure services, strengthening strategic collaborations (with UPOV, EUIPO, the European Commission, ...), business process automation, EUDPR risk assessments, Content Management strategy and Cloud transition preparations.

The volume of work in the pipeline for the IT unit continues growing at an accelerated pace, straining already the newly expanded internal resources. However, the progressive onboarding of external resources and outsourcing of development tasks ensured yet another productive year, in the second year of the COVID-19 era.

12. COOPERATION WITH THE DIRECTORATE-GENERAL FOR HEALTH AND FOOD SAFETY

12.1. Standing Committee on Community Plant Variety Rights

In 2021 there was no meeting of the Standing Committee on CPVR.

12.2. Standing Committee on Plants, Animals, Food and Feed

12.2.1. 'Seeds and propagating material for agriculture and horticulture' section

This European Commission Committee met twice by video-conference during 2021.

Of particular interest for the CPVO throughout 2021 were the following:

- The European Commission / CPVO project on a unique EU IT system on plant varieties.
- Exchange of views on a working document amending Commission Regulation (EC) No 637/2009 on rules as to the suitability of the denominations of varieties of agricultural plant species and vegetable species.
- Update on the preparations of a temporary experiment on organic varieties.
- Exchange of views on a Commission working document on an amendment of the Annexes of Council Directive 66/402/EEC concerning temporary rules for hybrid wheat.
- Exchange of views on the inclusion of varieties of vegetable rootstocks into Commission Decision 2004/842/EC.
- A report on a temporary experiment under Commission Implementing Decision (EU) 2017/547 as regards seed potato tubers derived from true potato seed.



Potato



Oats

- The final report on a temporary experiment under Commission Implementing Decision 2014/150/EU providing for certain derogations for the marketing of populations of the plant species wheat, barley, oats and maize pursuant to Council Directive 66/402/EEC.
- EU legislation related to Cannabis sativa ssp.
- A draft Commission Implementing Directive amending Annex I to Council Directives 66/401/EEC on the marketing of fodder plant seed, 66/402/EEC on the marketing of cereal seed, 2002/54/EC on the marketing of beet seed, 2002/55/EC on the marketing of vegetable seed and 2002/57/EC on the marketing of seed of oil and fiber plants, as regards the use of bio-molecular techniques.
- Update on the revision of the legislation on plant reproductive material.

12.2.2. 'Standing Committee on Propagating Material of Ornamental Plants' section

There was no meeting of this committee in 2021.

12.2.3. 'Standing Committee on Propagating Material and Plants of Fruit Genera and Species' section

This European Commission Committee met once by video-conference in 2021, the following points were of particular interest for the CPVO:

- the revision of the plant and forest reproductive material legislation.
- developments on EU legislation on Union regulated non-quarantine pests on propagating material of ornamental plants, fruit propagating material and fruit plants.
- Update on the Fruit Reproductive Material Information System (FRUMATIS).

12.3. Council working parties

Following an invitation from the DG for Health and Food Safety to join the European Commission delegation, the CPVO participated in the following Council working parties in 2021:

- working parties on coordination of EU positions on UPOV meetings (Council, Consultative Committee, Technical Committee, and Administrative and Legal Committee).
- working parties on coordination of EU positions on the OECD annual meeting.

13. EXTERNAL RELATIONS

13.1. Cooperation with external organisations

13.1.1. Breeders' organisations

Regular interaction with breeders' organisations is a top priority for the CPVO. The CPVO ensures it is in frequent contact with breeders' organisations, representing the majority of users of the EU system. Ciopora, Euroseeds and Plantum are all key contributors to the work of the CPVO.

Representatives of these three organisations participate in the AC of the CPVO as observers and in all relevant meetings of technical experts organised by the CPVO. These organisations actively contribute to seminars and workshops organised by the CPVO. The breeders' organisations play an invaluable role in spreading information and knowledge on all aspects of the Community plant variety system throughout the EU.

The CPVO is most grateful for the constructive and positive collaboration with these organisations, they are effectively conveying CPVO's work on PVRs to breeders.

In 2021 the CPVO attended by video-conference the annual meetings of Euroseeds and of Ciopora. The CPVO gave in that context various presentations and participated in panel discussions.

During the bilateral meetings the CPVO held with Ciopora, Euroseeds, and Plantum, issues of mutual interest were discussed. Those discussions related amongst other issues to fee and cost aspects, essentially derived varieties, public access questions, the international strategy of the CPVO, the interface of PBR and patents, the new organic regulation and its potential consequences, the minimum distance project, enforcement issues, and the



Barley

publication of variety descriptions. It was concluded that such formal bilateral meetings should continue being organised on an annual basis.

13.1.2. The International Union for the Protection of New Varieties of Plants

The CPVO has participated in the activities of the UPOV since 1996. In July 2005 the European Community (now the EU) became a member of UPOV.

During 2021, as members of the EU delegation, CPVO officials participated in (virtual) meetings of the following UPOV bodies, committees and working groups.

- The UPOV Council.
- The Legal and Administrative Committee.
- The Technical Committee.
- The Consultative Committee.
- Technical working parties.
- Working Group on Biochemical and Molecular Techniques, and DNA-Profiling in particular.
- The ad hoc working group on the development of an electronic application form.
- The ad hoc working group on variety denominations.
- The ad hoc working group on essentially derived varieties.

Senior officials of the UPOV regularly attend meetings of experts or working groups organised by the CPVO dealing with technical and legal issues of common interest.

In several regions of the world where countries are members of UPOV, such as Asia, Africa, Latin America and the Caribbean, there is an emergent interest in knowing the details and results of PVR systems with a regional scope and learning from the experience accumulated. The CPVO frequently provides speakers for seminars and technical workshops organised by UPOV. Furthermore, several staff members of the CPVO also act as tutors in the various distance-learning courses offered by UPOV.

13.1.3. The European Union Intellectual Property Office

In 2021 the CPVO continued its good cooperation with the EUIPO and signed on 15 and 17 July 2021 the renewed service-level agreement, covering different areas, such as internal audit, international cooperation, data protection, IT and HR services, the Observatory and the development of a PVR Academy.

The CPVO continued to participate in the enforcement and legal working groups of the European Observatory on Infringements of intellectual property rights (IPRs), as well as in the plenary session.

In 2021 the CPVO and the Observatory conducted a joint study on the economic contribution of the PVR system in the EU, which was released on 28 April 2022.

Moreover, the CPVO contributed to the update of the observatory national case-law database in the domain of enforcement of PVRs by national courts. In the area of international cooperation, the CPVO jointly implemented the IP Key projects, with a new phase starting in 2022 (China, Latin America, and South-East Asia) and also the cooperation projects in the Caribbean (CarIPI) and Africa (AfrIPI).

In the area of data protection, the DPO of the EUIPO continues being the appointed DPO of the CPVO. In the IT area, both offices agreed to intensify their cooperation with a view to strengthening synergies in the development of IT projects.

13.1.4. The European Patent Office

The cooperation with the EPO was put on hold due to delivery of the Opinion of the Enlarged Board of Appeal of 14 May 2020 in case G3/19, which brought to the organisation of a joint webinar in January 2021.

Moreover, in 2021 the CPVO and the EPO started the process to renew their cooperation by means of an administrative arrangement.

13.1.5. OECD

In 2021 the CPVO attended the annual virtual meeting of the OECD seed schemes, the related technical working group meeting and some of the ad hoc working parties. Of particular interest for the CPVO are the OECD activities in respect of biochemical and molecular techniques, aspects related to variety identity and variety descriptions as well as discussions related to digital technologies for trade, traceability and certification.

13.1.6. Other EU institutions

The CPVO maintains regular external contacts by participating in meetings organised by the following bodies and on the following topics:

- The European Commission DG Human Resources and Security implementation of the staff regulations.
- The European Commission DG Budget implementation of the new financial regulation.
- The European Commission DG Trade cooperation in the field of the EU-funded project IP Key project with China, Latin America and South-East Asia.
- The European Commission DG International Partnerships (INTPA) (former DG DEVCO)

 cooperation in the field of EU-funded projects 'Caribbean Forum of the African,
 Caribbean and Pacific Group of States intellectual property rights and innovation' and "Intellectual Property Rights Action for Africa'.

- The European Commission DG Grow cooperation in the field of the IP Action Plan and SMEs, with a view to extend services such as the IP Scan and the IP Vouchers to PVRs
- The committees on legal affairs and for agriculture and rural development of the European Parliament.

In addition, other fields of external activity can be mentioned, such as the following.

- The relevant standing committees of the European Commission.
- The Management Board of the Translation Centre for the Bodies of the EU.
- The coordination of the EU agencies at management level.
- The annual coordination meeting of the Publications Office of the EU with the EU agencies.
- The meetings of the DPOs of the EU agencies, as well as other working groups established under the umbrella of the coordination of EU agencies, such as the Inter-Agencies Legal Network, the Network of Agencies Procurement Officers, the Inter-Agency Appeal Proceedings Network, the Performance Development Network and the Head of Communication Inter-Agency Network (HCIN).
- Cooperation with the European Union Agency for Law Enforcement Training and the European Union Agency for Law Enforcement Cooperation in order to raise the awareness of the law enforcement agencies about the infringement of PVRs in the framework of the Virtual Training Centre for police and customs officials and the operation 'Opson' to fight against the counterfeiting of foodstuffs. This aims at enhancing cooperation between the law enforcement and regulatory authorities involved in the field of PVRs.

13.1.7. Non-governmental organisations

In addition to the cooperation as mentioned in the previous chapters, the CPVO has contact and communicates with various non-governmental organisations.

An annual bilateral meeting is organised with the International Association for Horticultural Production (AIPH). Due to time constraints the 2021 meeting had been organised in early 2022. The CPVO informed AIPH on the ongoing discussions in the CPVO's AC and AIPH reported on issues of relevance for the CPVO which are discussed at AIPH.

Representatives from ECO-PB attend the meetings of the CPVO crop sector expert groups for agricultural and vegetable crops as well as the annual meeting of the CPVO with its EOs as observers.

13.1.8. Local partners

In 2021, the CPVO continued its engagement and collaboration with its local partners even though several activities were cancelled due to the COVID-19 pandemic, such as the participation in the local fairs "SIVAL" and "Salon du Vegetal".

A similar scenario applied to the "Made in Angers" festival for which the CPVO premises were selected for hosting the kick-off press event, in the presence of local government representatives. Even though it would have been the 15th year in a row that the CPVO was present at the festival, it was decided to withdraw from the 2021 edition due to a sudden peak in COVID-19 contaminations in the region and the will to take precautionary measures for CPVO staff and to limit access to our premises.

Later in the year, the CPVO devised a new cooperation partnership with "Maison de l'Europe", the local office tasked to promote the European Union policies towards the population of the Angers region. The CPVO also participated in a roundtable debate called "Actors, meaning and objectives of sustainable development in Europe" organised by ESSCA, the school of management in Angers.

13.2. Training and promotion of the Community plant variety rights system

13.2.1. CPVO international relations strategy

The present CPVO international relations strategy was adopted in March 2021.

This strategy aligns the work programme of the CPVO with the new EU policy objectives, which include among others the European Green Deal to overcome the climate change and environmental degradation. The objective to make Europe climate neutral by 2050 is an ambitious goal and different policies will support its attainment. The EU Green Deal, the Farm to Fork strategy, the biodiversity strategy and, at global level, the UN Sustainable Development Goals are at the heart of the process, and the CPVO is committed to



EU Commissioner Stella Kyriakides - copyright European Union 2020

contribute to their implementation and to support the achievement of these policy objectives.

These strategies are accompanied by several other policies concerning trade, SMEs, Intellectual Property and innovation, and they all go in the direction of making the EU a strong actor in the global and interconnected market.

The CPVO strategy builds upon the contribution of the Agency to the implementation of several EU-Funded projects (IPKey China, South-East Asia and Latin America, CarlPI, AfrIPI) together with the European Commission and the European Union Intellectual Property Office, with the support of national and international authorities. Moreover, the CPVO contributed to the implementation of the PPOV project (Projet de Renforcement et Promotion du Système de Protection des Obtentions Végétales) with OAPI and other initiatives under different European programs (e.g. TAIEX)

The international outreach of the CPVO is also focused on contributing to working groups with a legal and scientific focus at international level. In 2021 it was launched a study on the CPVR impact on EU economy with the Observatory on infringements of Intellectual Property Rights.

To cite the CPVO international relations strategy, the promotion of a reliable and effective plant variety protection system goes hand in hand with the need to foster investment in the sector. A harmonised level of protection of intangible assets at a global level ensures a higher level of investment in trade, favours exports from the EU, technology transfers and financial investments in businesses inside and outside Europe.

13.2.2. Participation in international fairs

The CPVO considers its participation in international fairs and open days at EOs to be a useful opportunity to promote the CPVR system, to have direct contact with applicants and to provide information to breeders. However, due to the COVID-19 pandemic, the International Trade Fair for Plants (IPM) in Essen, Germany, a fair to which the CPVO regularly participates in a joint stand with the Bundessortenamt, Naktuinbouw and GEVES was cancelled. For the same reason, the CPVO did not participate in other fairs or held any events for plant breeders.

13.2.3. The African Intellectual Property Organisation roadmap

In 2014, OAPI became the second intergovernmental organisation and the seventy second member to join UPOV. OAPI adopted an ambitious 5-year roadmap, from 2015 to 2020, which they are eagerly pursuing. The CPVO, GEVES, the French Association for Seeds and Seedlings (GNIS), Naktuinbouw, and the United States Patent and Trademark Office are supportive of this initiative and are actively supporting its implementation.

OAPI operates a PVR system that covers the territory of its 17 Member States: Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, Guinea, Guinea-Bissau, Mali, Mauritania, Niger, Senegal, and Togo.

The European Commission signed an agreement with OAPI in mid-2019 followed by a formal opening procedure held on 23 September 2019. The project is limited to 2019-2021.

In 2021 the project adapted to the COVID-19 pandemic by organising virtual and hybrid events, in order to carry on with the implementation of the roadmap, thanks to the extension granted by the European Commission.

The project successfully carried out six regional and national seminars in 2021 involving OAPI Member States in the sharing of EU and African experiences on several aspect of Plant Variety protection. Namely, the focus of the events was on commercialisation of new plant varieties, the valorisation of research and development in the plant variety sector, the importance of innovation and intellectual property to secure investment in the breeding sector and to benefit the agricultural system at large, by enabling the use of safer and better performing varieties.

One technical seminar was organised in January 2021 on the role of Examination Offices in the technical examination of new plant varieties, including practical examples of DUS testing.

The implementation of the project will continue in 2022.

13.2.4. IP Key Latin America (LA)

In 2021 most events were put on hold due to the Covid-19 pandemic. The IPKey Latin America came to an end in August 2021.

Under the 2021 AWP a study on the PVR legislation of Ecuador was finalised, the results of which will be presented under the next phase of the IPKey Latin America project.

Under the project it has been developed a distance learning course on licensing plant varieties ("Laboratorio de Contratos de Licencias de Variedades Vegetales") that was finalised in 2021.

13.2.5. IP Key South-East Asia (SEA)

In the framework of the IP Key SEA project, during 2021, a webinar series were held on 10 and 11 June 2021. The topics covered during the webinars concerned the benefits of the UPOV 1991 Convention, the contribution of plant breeding and plant variety protection to a sustainable economic development and its impact on the society at large.

The webinars brought in the perspectives of both the public/policy sector and farmers and plant breeders from the EU and from selected countries in the South-East Asia region.

Following the open awareness raising webinar, from 17 to 18 June 2021, a legal training was organised for Thai officials and trade negotiators on UPOV 1991.

13.2.6. AfrIPI

The Pan-African project on Intellectual Property Rights (Africa Intellectual Property Rights and Innovation Project - AfrIPI) was officially launched in August 2021.

During the first months of implementation, in November 2021, the CPVO contributed to the organisation of a regional activity on the Arusha Protocol, in order to promote it among ARIPO Member States and to strengthen the exchange of information and cooperation in the region.

13.2.7. CarlPI

Five activities were carried out in 2021 in the framework of the CarlPI project.

One technical webinar in April 2021 focused on the carrying out of technical examinations and the importance of the independence of DUS testing, and a second one concentrated on the administrative procedures necessary for the establishment of a functional and effective PVR system.

In September the CPVO, together with UPOV, participated in a webinar regarding potential regional cooperation initiatives in the Caribbean region, which was followed by the circulation of a policy paper to better assess the state of play in the region and to plan the way forward of the project in the PVR field.

In October 2021 the CPVO participated through the project to the Caribbean Week of Agriculture, including high level panels with the presence of Ministries and public bodies' representatives.

Finally, after Saint Vincent and the Grenadines deposited their instrument of accession to the UPOV Convention on 22 February 2021 and became the seventy-seventh member of UPOV on March 22, 2021, CarlPI provided advice services to implement a registration framework for PVRs in the country, in conformity with UPOV and the national legislation. In particular, this activity foresees the development of implementing Regulations that complement the National Law on Plant Variety Protection; the adaptation of standard forms recommended by UPOV for all phases and processes of PVR applications; the development of guidelines for the administration and management of application procedures; the delivering of training and build technical capacity of DUS examiners of Saint Vincent and the Grenadines.

13.2.8. Universities

In 2021, the CPVO continued its collaboration with universities with the aim of spreading awareness on the PVP system in the academic community. The CPVO continued its collaboration with the Universities of Alicante (Magister Lycentinys), University of Stockholm and Maastricht University. Several successful internships at the CPVO were granted to former students at these universities' Masters in IP Law.

In particular, the CPVO supports the Magister Lvcentinvs, the master in IP of the University of Alicante, that continues implementing a special intensive course dedicated to PVRs.

The CPVO has also provided lectures at local universities, including the Ecole Supérieure d'Agriculture (ESA) and the ESSCA School of management of Angers (FR).

Finally, the year 2021 saw a broadening of the number of collaborations with universities, which now also includes the LUISS University of Rome (IT).

14. PUBLIC ACCESS TO DOCUMENTS

In 2001 specific rules on public access to documents held by the Parliament, the Council and the European Commission were introduced by the adoption of Regulation (EC) No 1049/2001 of the European Parliament and of the Council of 30 May 2001 regarding public access to European Parliament, Council and Commission documents. In order for these rules to also apply to documents held by the CPVO, a new article, Article 33(a), was introduced into the BR in 2003 by the adoption of Council Regulation (EC) No 1650/2003 of 18 June 2003 amending Regulation (EC) No 2100/94 on CPVR.

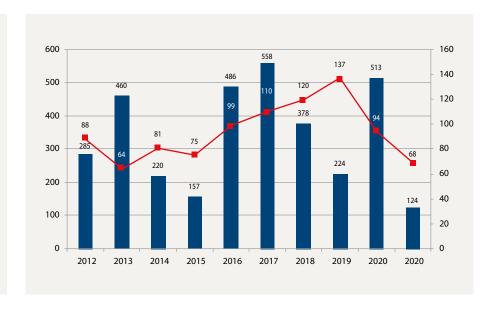
Article 33(a) contains the following elements.

- Regulation (EC) No 1049/2001 shall also apply to documents held by the CPVO, and by its Board of Appeal. This provision entered into force on 1 October 2003.
- The AC shall adopt practical arrangements for implementing Regulation (EC)
 No 1049/2001. The AC adopted such practical arrangements on 25 March 2004.
 These rules entered into force on 1 April 2004.
- Decisions taken by the CPVO on public access to documents may form the subject of a complaint to the Ombudsman or of an action before the Court of Justice.

Regulation (EC) No 1049/2001 and the rules adopted by the AC (modified during the October 2014 meeting of the AC to reflect the new work organisation within the Legal Unit of the CPVO and modified during the September 2019 meeting of the AC to reflect the new work organisation within the Board of Appeal of the CPVO, and its registry) are available on the website of the CPVO. Information on these rules and the forms to use when requesting access to a document are also published on the website of the CPVO.

The CPVO monitors the implementation and application of the rules on public access to documents by reporting annually on information such as the number of cases in which the CPVO, and its Board of Appeal refused to grant access to documents, and the reasons





for such refusals. In the event of a total or partial refusal to a public access request by the CPVO or its Board of Appeal, the applicant has the right to make a confirmatory application asking the president of the CPVO or the chair of the Board of Appeal to reconsider its position.

Table 25: Number of public access requests

receipt	Number of requests for access received	Number of partial refusals	Reasons for such refusals	Confirmatory applications
2004	30	6	Confidential technical questionnaire not sent	
2005	55	2	Confidential technical questionnaire not sent	
2006	58	6	Confidential technical questionnaire not sent	
2007	55	17	Confidential technical questionnaire not sent/ information of commercial interest not sent	2 (successful)
2008	57	19	Confidential technical questionnaire/ photo/ assignment not sent	1 (unsuccessful)
2009	54	28	Confidential technical questionnaire not sent/ information of commercial interest not sent/photos not available	2 (successful)
2010	63	29	Confidential technical questionnaire not sent/ information of commercial interest not sent	1 (unsuccessful)
2011	71	27	Confidential technical questionnaire not sent/ information of commercial interest not sent	2 (1 unsuccessful and 1 successful)
2012	88	57	Confidential technical questionnaire not sent/ information of commercial interest not sent	8 (3 unsuccessful and 5 successful)
2013	63	18	Confidential technical questionnaire not sent/ information of commercial interest not sent	1 (unsuccessful)
2014	81	27	Confidential technical questionnaire not sent/ information of commercial interest not sent	4 (1 unsuccessful and 3 successful)
2015	75	17	Confidential technical questionnaire not sent	3 (2 unsuccessful and 1 successful)
2016	99	26	Confidential technical questionnaire not sent	4 (successful)
2017	110	45	Confidential technical questionnaire not sent	2 (1 unsuccessful and 1 successful)
2018	120	35	Confidential technical questionnaire not sent	2 (1 unsuccessful and 1 successful)
2019	137	39	Confidential technical questionnaire not sent	4 (3 unsuccessful and 1 successful)
2020	94	38	Confidential technical questionnaire not sent	3 (3 successful)
2021	68	13	Confidential technical questionnaire not sent (12) Parts of the contracts covered by a confidentiality agreement not sent (1)	1 (1 successful)

15. REPORT OF THE DATA PROTECTION OFFICER

15.1. Legal background

As Agency of the EU, the CPVO must comply with the obligations stemming from Regulation (EU) No 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the EU institutions, bodies, offices and agencies and on the free movement of such data (EUDPR).

15.2. Role and tasks of the data protection officer

Regulation (EU) No 2018/1725 requires that each EU institution, agency and body (European Union Institutions (EUIs)) designates a data protection officer. The DPO should ensure, in an independent manner, the internal application of the provisions in the Regulation and that the rights and freedoms of the data subjects are unlikely to be adversely affected by the processing operations.

In March 2018, an addendum to the Memorandum of Understanding between the CPVO and the EUIPO was signed to outsource the tasks of the DPO to the EUIPO. The cooperation in the field of data protection was extended by virtue of the service- level agreement between the EUIPO and the CPVO, which entered into force on 21 July 2021.

The current DPO of the CPVO (and the EUIPO) is Ms Gloria Folguera Ventura. The Deputy DPO of the CPVO, Mr Cristobal Enrique Lander Rodríguez, and the data protection Specialist, Ms. Emma Rodríguez Montes also contributed to the CPVO with support in 2021.

In a nutshell, the responsibilities and actions of the DPO are aimed at the following.

- Ensuring and demonstrating legal compliance with the applicable EU data protection legislation.
- Guaranteeing a high level of transparency and accountability of the CPVO policies, procedures and practices, as well as of security for the data subjects (including both CPVO staff members and external users) in the exercise and enforcement of their rights.
- Raising awareness of the applicable data protection legislation and its application within
 the remit of the CPVO functions, as reflected in the CPVO policies and procedures
 implementing data protection provisions.

15.3. Report of the data protection officer for 2021

15.3.1. Consultation and review of data processing operations

The DPO regularly responds to consultations relating to privacy and data protection matters and reviews the documentation of the new or updated personal data processing operations.

Throughout the course of 2021, the DPO has assisted the CPVO data protection coordinator (DPC) and the CPVO Data Controllers in updating existing contracts as well as internal policies and procedures in accordance with Regulation (EU) No 2018/1725. A total of 42 consultations have been handled by the DPO in 2021.

Moreover, some new processing operations were recorded in the register of records and the corresponding privacy statements were also drafted. As different processing activities involved the processing of personal data of external data subjects, the CPVO published the relevant information thereon on its website. In addition, the data protection section of the CPVO website was revamped with a view to make it more user-friendly.

In March 2021, the European Data Protection Supervisor (EDPS) launched a COVID-19 pandemic survey to assess how EUIs were addressing the protection of individuals raised by the processing activities carried out in connection with the COVID-19 pandemic.

15.3.2. Publication of CPVO Register of Records

As Agency of the EU, the CPVO is required to make its register of data protection records publicly accessible, in accordance with Article 31(5) of Regulation (EU) No 2018/1725. To this end, in mid-April 2021, the CPVO published its centralised Register of Records of processing activities carried out within the remit of the CPVO', with accurate, easily accessible, and up-to-date information.

The 74 records contained therein were first internally validated by the respective data Controller, and the content of the record, including the elements of information listed under Article 31(1) of Regulation (EU) No 2018/1725, is regularly reviewed by the DPC with the assistance of the DPO.

15.3.3. EDPS Remote Audit on restrictions at the CPVO

In April 2021, the EDPS announced the conducting of a remote audit on the implementation by EUIs of Article 25 EUDPR. In this framework, the EDPS reviewed the CPVO Internal Rules regarding restrictions under Article 25 as well as their implementation in practice, and the audit was completed satisfactorily in December 2021.

The cited rules ("Decision of the Administrative Council of the CPVO of 1 April 2020 on internal rules concerning restrictions of certain rights of data subjects in relation to processing of personal data in the framework of the functioning of the CPVO") are publicly available on the data protection section of the CPVO.

15.3.4. Full implementation of Microsoft Office 365

The DPO continued reviewing the contractual aspects relating to the full deployment of Microsoft Office 365 Desktop and of the Online application services at the CPVO.

The CPVO was already using Microsoft services, in particular Office 2016 and Microsoft Teams, which use was already enhanced due to the COVID-19 pandemic. In view of the full deployment of Microsoft Office 365 Desktop and Online application services, the CPVO had already completed a data protection impact assessment (DPIA) thereon in 2020 along with the corresponding relevant data protection documentation.

In addition, and before the full deployment, the CPVO performed further required actions in this regard throughout the course of 2021. These actions were aimed at implementing further the recommendations issued by the EDPS, in particular, those issued on 2 July 2020, in the EDPS paper on "Outcome of own-initiative investigation into EU institutions' use of Microsoft products and services".

The implementation of said recommendations prompted the CPVO to review existing policies and procedures, to put in place new tailored ones, as well as to establish periodical controls. In this vein, the CPVO established a general procedure for validating data protection and security aspects concerning any ICT tool acquired in the framework of procurement procedures, encompassing also existing applications and new contracts.

The deployment of Microsoft Office 365 was gradual. In November 2021, the CPVO performed a risk assessment on the deployment of new MS functionalities, particularly on an application running on Microsoft Office 365, and which provide for no-code business process management and automation tools.

15.3.5. Data Protection Impact Assessments and Risk Assessments

According to Article 39 of the Regulation (EU) No 2018/1725, the CPVO as an European Union institution is required to perform data protection impact assessments when the processing is suspected to lead to high risks for individuals. To this end, the EDPS makes available a list of processing operations subject to a DPIA.

In 2021, the CPVO carried out two DPIAs to assess the risks arising from specific processing operations. The assessments concerned the processing of data in the context of COVID-19 pandemic contact tracing, and the processing operations with an information communication technology (ICT) tool concerning the deployment of a hosting cloud solution for CPVO applications to be embedded in the CPVO's ICT infrastructure.

In June 2021, a risk assessment was performed on the processing operations carried out under a new ICT tool for the conduct of remote oral proceedings with language interpretation.

15.3.6. Requests and complaints of data subjects

The remit of the DPO tasks also includes investigating and responding to complaints filed before the DPO either internally (by staff members) or externally (by CPVO users or other

concerned data subjects). In 2021, no complaints from employees were received by the DPO, nor by any external user. In terms of requests by data subjects, the CPVO received one data subject request from an external user and another external request that was qualified as request for information.

In what concerns complaints to the EDPS, a complaint was lodged in November 2021, which was rejected by the EDPS on the grounds of inadmissibility and accordingly dismissed.

15.3.7. Data breaches

Three data breaches took place at the CPVO in 2021. Based on their low impact on the protection of individuals, none of them was reported to the EDPS. The analysis of the cases and the subsequent drafting of the data breaches reports was performed within the required time limits under the guidance of the DPO, and preventive and mitigating measures commensurate with the circumstances of the breaches were adopted. One security incident was reported in February 2021.

15.3.8. Training to CPVO staff members

In October 2021, the CPVO organised a training via video-conference to raise awareness among CPVO staff. The training was divided in three parts, namely:

- key data protection principles and obligations of controllers towards data subjects,
- the deployment and use of Microsoft Office 365,
- the deployment of an ICT tool to be used for CPVO procedures requiring simultaneous interpretation in different languages.

The organisation of this all-encompassing training was envisaged as a mitigating measure arising from both ICT tools, respectively. The training was provided by the DPO, the Deputy DPO, the DPC, a CPVO staff specialised in DP and a CPVO IT administrator.

In addition, the CPVO established in June 2021 as mandatory for CPVO staff members the EDPS course "EUDPR fast track training course for practical application in your daily task" (available via the EU Learn portal), to be completed within six months.

15.3.9. Cooperation

During 2021, the DPO actively participated in different networks, co-chairing the DPOs working group on international data transfers, being an active member of the ICTAC-DPOs network and chairing the DPOs Iberia network. Through these channels, cooperation with other EUIs was enhanced, including an exchange of views and best practices impacting positively on the CPVO's data protection framework. As a result of this activity, clarifications with DIGIT were obtained on the SIDE-II framework contract, strong cooperation with the EDPS in the area of data transfers was achieved and progress was made on the administrative

arrangement template for transfers between EUIs and International Organisations. Finally, a comparative table between EUDPR and General Data Protection Regulation (GDPR) was drafted within the DPOs Iberia network.

16. APPEAL PROCEDURES

16.1. Composition of the Board of Appeal of the **CPVO**

The Board of Appeal of the CPVO is composed of a chair, an alternate chair, and qualified members.

16.1.1. Chair and Alternate of the Board of Appeal

Paul van der Kooij was appointed as Chair of the Board of Appeal for a term of 5 years by a Council decision of 19 February 2018 (OJ C 65, 21.2.2018, p. 4). His term runs from 19 February 2018 until 18 February 2023.

Marcus Navin-Jones was appointed as Alternate to the Chair for a term of 5 years by a Council decision of 20 December 2021 (OJ C 27, 19.1.2021, p. 16). His term runs from 20 February 2022 until 19 February 2027.

16.1.2. Qualified Members of the Board of Appeal

The AC of the CPVO at its meeting of 30 September 2020 adopted, in accordance with Article 47(2) of the BR, the following list of 20 qualified members of the Board of Appeal for a period of 5 years, from 23 February 2021 to 22 February 2026.

Table 26: List of qualified members (from 23.2.2021 to 22.2.2026)

- Richard Brand
- 2. Adrián Crespo
- 3. Paul de Heij
- Ellen De Keyser
 Willy Dillen
- 6. Huib Ghijsen
- Ofelia Kirkorian-Tsonkova
- 8. Hidde Koenraad
- 9. Stefan Martin
- 10. Virginia Melgar

- 11. Axel Metzger
- 12. Cinzia Negro
- 13. André Pohlmann
- 14. Dirk Reheul
- 15. Kurt Riechenberg
- 16. Beate Rücker
- 17. Ivana Dugalić
- 18. Zsolt Szani
- 19. Nuria Urquía Fernández
- 20. Kees van Ettekoven

16.2. Decisions of the Board of Appeal in 2021

Case A003/2020 - 'Penny' - Prunus avium (L.) L. Contested decision: Cancellation for unpaid annual fees, Decision No. 2140 of 2 March 2020.

On 12 April 2021, the Board of Appeal composed of the Chair, the Rapporteur, Ms Ofelia Kirkorian-Tsonkova, and the third member, Mr Kurt Riechenberg, dismissed the appeal. It took a landmark decision in relation to the level of due diligence expected on the part of a titleholder when carrying out payments for annual fees and having accepted the terms and conditions of the CPVO User Area, MyPVR. A human mistake on the part of a titleholder cannot afford redress in the case of a cancellation decision for unpaid annual

fees when the titleholder is deemed not to have applied in due diligence. Community Plant Variety Rights afford intellectual property protection throughout the EU territory, provided the annual fees are duly carried out, as foreseen by the EU legislator. It was concluded that the discretion of the CPVO was limited when it came to the interpretation of due diligence. The Appellant had to bear the costs of the appeal proceedings.

Case A009/2020 – 'Ridley 0501' - *Vaccinium* L. Contested decision: CPVO Refusal decision R 1768 of 6 April 2020 – for lack of uniformity.

On 1 June 2021, the Board of Appeal composed of the Chair, the Rapporteur, Mr Beate Rücker, and the third member, Ms Ivana Dugalić, did find decisive arguments for repealing the refusal decision of the CPVO. As a result, decision R 1768 relating to Community Plant Variety Right application 2015/2281 was cancelled, the applicant was given a new deadline to supply plant material for a new technical examination, each party had to bear its own costs of the appeal proceedings, a refund of the appeal fee was refused, and the CPVO had to bear the costs of the new examination.

Case A013/2020 – 'Red Queen' - *Actinidia chinensis* Planch. Contested decision: the decision of the CPVO of 24 September 2020 not to amend an application date recorded as an entry in the CPVO register of applications.

On 3 November 2021, the Board of Appeal composed of the Chair, the Rapporteur, Mr André Pohlmann, and the third member, Mr Kees van Ettekoven, did find decisive arguments for cancelling the decision of the CPVO of 24 September 2020, it ordered the CPVO to set the application date of Community Plant Variety Right application 2019/0516 to 23 February 2019, and to correct the Register of applications for Community Plant Variety Rights accordingly. The CPVO had to bear the costs of the appeal proceedings, and to refund the appeal fees.

Summaries and complete decisions are available in the CPVO PVR case-law database, on the CPVO website.

16.3. Further actions to the Court of Justice in 2021

In accordance with Article 73 of the BR, a further action to the Court of Justice can be brought against decisions of the Board of Appeal.

16.3.1. New further actions in 2021

Case T-181/20 – **'Stark Gugger'** - *Malus domestica* Borkh. Contested decision: A008/2018 of 24 January 2020.

On 14 July 2021, the General Court dismissed the action and ordered Griba Baumschulgenossenschaft landwirtschaftliche Gesellschaft to pay the costs.

Case T-182/20 – 'Gala Perathoner' - *Malus domestica* Borkh. Contested decision: A004/2016 of 17 January 2020.

On 14 July 2021, the General Court dismissed the action and ordered Griba Baumschulgenossenschaft landwirtschaftliche Gesellschaft to pay the costs.

16.3.2. State of affairs of the further actions lodged with the Court of Justice

Table 27

Case No before the General Court	Contested decision	Variety denomination	Date of General Court ruling	Date of further appeal to the Court of Justice	Case No before the Court of Justice	Date of Court of Justice ruling
T-95/06	A001/2005	Nadorcott	31.1.2008	n/a	n/a	n/a
T-187/06	A003/2004	Sumcol 01	19.11.2008	29.1.2009	C-38/09 P	15.4.2010
T-187/06 DEP I	Non-payment of recoverable costs of the proceedings T-187/06	Sumcol 01	16.9.2013	n/a	n/a	n/a
n/a	n/a	Sumcol 01	N/A	7.2.2013	C-38/09 P-DEP	10.10.2013
T-133/08	A007/2007	Lemon Symphony	18.9.2012	28.11.2012	C-546/12 P	21.5.2015
T-134/08	A006/2007	Lemon Symphony	18.9.2012	28.11.2012	C-546/12 P	21.5.2015
T-135/08	A003/2007 and A004/2007	Gala Schnitzer	13.9.2010	15.11.2010	C-534/10 P	19.12.2012
T-177/08	A005/2007	Sumost 01	18.9.2012	28.11.2012	C-546/12 P	21.5.2015
T-242/09	A010/2007	Lemon Symphony	18.9.2012	28.11.2012	C-546/12 P	21.5.2015
T-367/11	A007/2010	Southern Splendour	21.10.2013	n/a	n/a	n/a
T-91/14	A004/2007	Gala Schnitzer	10.9.2015	23.11.2015	C-625/15 P	8.6.2017
T-92/14	A003/2007	Gala Schnitzer	10.9.2015	23.11.2015	C-625/15 P	8.6.2017
T-767/14	A007/2013	Oksana	13.7.2017	n/a	n/a	n/a
T-140/15	A010/2013	M02205	23.11.2017	n/a	n/a	n/a
T-425/15	A003/2010	Seimora	4.5.2017	n/a	n/a	n/a
T-426/15	A002/2014	Seimora	4.5.2017	n/a	n/a	n/a
T-428/15	A007/2009	Sumost 02	4.5.2017	n/a	n/a	n/a
T-177/16	A001/2015	Braeburn 78	5.2.2019	n/a	n/a	n/a
T-445/16	A005/2014	Gala Schnico	23.2.2018	7.5.2018	C-308/18 P	8.11.2018
T-405/16	A006/2014	Tang Gold	Withdrawn	n/a	n/a	n/a
T-765/17	A005/2016	Pinova	11.4.2019	11.6.2019	C-444/19 P	16.9.2019
T-112/18	A007/2016	Cripps Pink	24.9.2019	3.12.2019	C-886/19 P	3.3.2020
T-737/18	A009/2017	Siberia	25.6.2020	n/a	n/a	n/a
T-278/19	A010/2013-RENV	M 02205	13.3.2020	n/a	n/a	n/a
T-181/20	A008/2018	Stark Gugger	14.1.2021			
T-182/20	A004/2016	Gala Perathoner	14.1.2021			

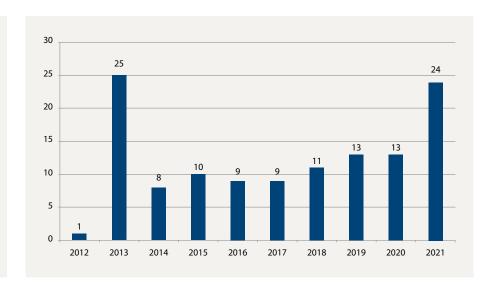
16.4. Appeals received by the CPVO and decisions reached by the Board of Appeal since its inception (statistics)

16.4.1. Number of notices of appeal lodged with the Board of **Appeal**

270 notices of appeal were lodged with the CPVO Board of Appeal since the opening of the CPVO.

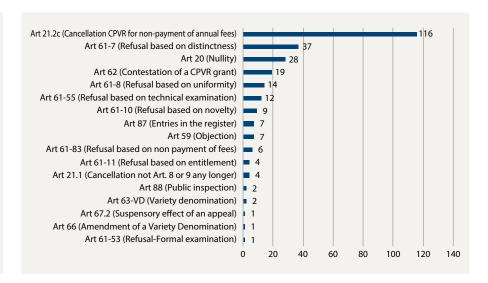
The annual number of appeals received in the last 10 years is shown in Figure 20.

Figure 18 Number of notices of appeal received per year between 2012 and



16.4.2. Legal basis of the appeals since 1996 (with reference to the BR) and number of cases

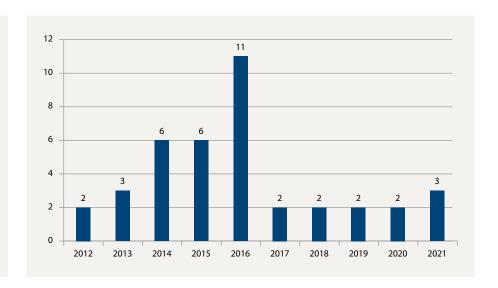
Figure 19Legal basis of the appeals since 1996 and number of cases



16.4.3. Decisions of the Board of Appeal per year

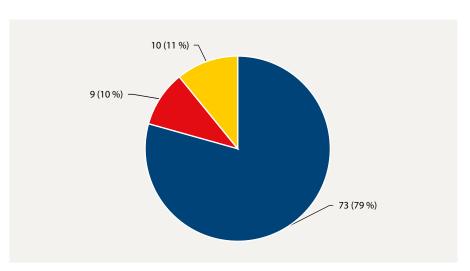
A total of 92 decisions were taken by the Board of Appeal of the CPVO between 1996 and 2021. The annual number of decisions taken in the last 10 years is shown in Figure 20.

Figure 20
Number of decisions reached by the
Board of Appeal per year over the
last 10 years



16.4.4. Outcome of the 92 decisions of the Board of Appeal (1996-2021)





The references of the decisions taken by the Board of Appeal are given in the following table.

Table 28

Year	Appeal case number and Board of Appeal decision date
1999	A002/1998 of 14.9.1999
2000	A001/1999 of 25.1.2000 A002/1999 of 19.5.2000
2001	A002/2000 of 27.3.2001 A004/2000 of 6.12.2001
2002	A005/2000 of 28.5.2002
2003	A005/2002 of 2.4.2003 A001/2002, A002/2002 and A003/2002 of 1.4.2003 A018/2002 of 14.5.2003 A008/2002, A009/2002, A010/2002, A011/2002, A012/2002 and A013/2002 of 15.5.2003 A017/2002 of 3.4.2003 A023/2002 of 8.10.2003 A031/2002 of 9.12.2003
2004	A003/2003 and A004/2003 of 4.6.2004 A005/2003 and A006/2003 of 28.9.2004 A001/2004 of 16.12.2004
2005	A006/2004 of 15.6.2005 A005/2004 of 16.6.2005 A004/2004 of 18.7.2005 A001/2005 of 8.11.2005
2006	A003/2004 of 2.5.2006 A004/2005 of 13.10.2006 A007/2005 of 7.7.2006

Year	Appeal case number and Board of Appeal decision date
2007	A001/2007 of 11.9.2007 A003/2007 and A004/2007 of 21.11.2007 A005/2007, A006/2007 and A007/2007 of 4.12.2007
2008	A011/2007 of 9.9.2008 A009/2008 of 2.12.2008 A001/2008 and A002/2008 of 4.12.2008
2009	A010/2007 of 23.1.2009 A004/2008 and A005/2008 of 21.4.2009 A010/2008 and A011/2008 of 8.10.2009
2010	A018/2008 of 15.3.2010
2011	A001/2010, A005/2010, A006/2010 and A007/2010 of 18.2.2011
2012	A009/2011 of 17.1.2012 A001/2012 of 10.10.2012
2013	A003/2007 and A004/2007 of 20.9.2013 (second decisions for the same cases further to remittal from the Court of Justice) A007/2011 of 23.4.2013
2014	A006/2013 of 13.1.2014 A004/2013 of 4.4.2014 A008/2013 of 1.7.2014 A007/2013 of 2.7.2014 A016/2013 of 11.9.2014 A010/2013 of 26.11.2014
2015	A007/2009 of 24.2.2015 A002/2010 of 24.2.2015 A003/2010 of 24.2.2015 A002/2014 of 24.2.2015 A001/2015 of 15.12.2015 A002/2015 of 15.12.2015
2016	A001/2014 of 3.3.2016 A003/2014 of 3.3.2016 A005/2014 of 22.4.2016 A006/2014 of 29.4.2016 A007/2014 of 29.4.2016 A008/2014 of 29.4.2016 A006/2015 of 15.8.2016 A009/2015 of 22.8.2016 A005/2007-RENV of 2.9.2016 A006/2007-RENV of 2.9.2016
2017	A005/2016 of 16.8.2017 A007/2016 of 14.9.2017
2018	A001/2017 of 13.3.2018 A009/2017 of 15.10.2018
2019	A010/2013-RENV of 27.2.2019 A007/2018 of 17.5.2019
2020	A004/2016 of 17.1.2020 A008/2018 of 24.1.2020
2021	A003/2020 of 12.4.2021 A009/2020 of 01.6.2021 A013/2020 of 03.11.2021

The detailed decisions of the Board of Appeal are available in the CPVO case-law database, on the CPVO website.

17. CONFLICTS OF INTEREST

In 2021 the CPVO continued its participation in the activities of the interagency task force on conflicts of interest organised by the DG Health and Food Safety, with the aim of implementing the December 2013 European Commission 'Guidelines on the prevention and management of conflicts of interest in EU decentralised agencies (for members of the management board, executive directors and experts on scientific committees or other similar bodies and members of boards of appeal).

Apart from the decision-making process relating to the core business of the CPVO, there are other decisions and procedures in the CPVO in which impartiality and objectivity are very important, such as employment procedures, public procurement and providing funds for R & D projects. Regarding employment procedures in particular, the CPVO staff members are subject to the staff regulations, which contain several provisions addressing situations of conflicts of interest. Nevertheless, over the years, procedures, provisions in agreements and declarations of absence of conflicts of interest have been introduced to remind the persons concerned about the importance of acting independently, with transparency, and with integrity.

Having taken the European Commission guidelines into consideration, the AC adopted during its meeting in October 2015 a CPVO policy on prevention and management of conflict of interest. The policy was amended in 2021 and the proposed changes were approved by the AC at its second annual meeting of October 2021. This further revision of the policy has the objective to enhance the transparency of the CPVO, provide a more accurate and exhaustive text (including in the declaration of interest's templates) and update the rules in place to bring greater consistency with other internal procedures or the CPVO's practice.

MAIN ACRONYMS, INITIALISMS AND ABBREVIATIONS

Acronym/init	ialism/ abbreviation
Α	
AC	Administrative Council of the CPVO
AGES	Österreichische Agentur für Gesundheit und Ernährungssicherheit/ Austrian Agency for Health and Food Safety (Austria)
AIPH	International Association for Horticultural Production
В	
ВСР	business continuity plan
BR	Basic regulation: Council Regulation (EC) No 2100/94 of 27 July 1994 on Community plant variety rights
BSA	Bundessortenamt/ Federal Plant Variety Office (Germany)
С	
Ciopora	International Community of Breeders of Asexually Reproduced Ornamental and Fruit Varieties
COY	Combined over year: a statistical method to analyse over-years results in species with multiannual testing
Coboru	Centralny Osrodek Badania Odmian Roslin Uprawnych/ Research Centre for Cultivar Testing (Poland)
CPVO	Community Plant Variety Office
CPVR(s)	Community plant variety rights
CREA	Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria/ Council for Agricultural Research and Agricultural Economics Analysis (Italy)
CREA-DC	Consiglio per la ricerca in agricoltura e l'analisi dell'economia agrarian – Difesa e Certificzione/ Council for Agricultural Research and Agricultural Economics Analysis – Research Centre for Plant Protection and Certification (Italy)
CREA-SCS	Consiglio per la ricerca in agricoltura e l'analisi dell'economia agrarian (Italy)
D	
DGAV	Direcção-Geral de Alimentação e Veterinária/ Portuguese National Authority for Animal Health
DNA	deoxyribonucleic acid
DoU	deed of understanding
DPC	data protection coordinator
DPIA(s)	data protection impact assessments
DPO	data protection officer
DURDUS	CPVO co-financed project on the use of molecular data for DUS in durum wheat
DUS	distinctness, uniformity and stability
E	
ECO-PB	European Consortium for Organic Plant Breeding
EDPS	European Data Protection Supervisor
EO(s)	examination office(s)
EPO	European Patent Office
ER	ER entrustment requirements
EU	European Union

Acronym/init	ialism/ abbreviation
EUDPR	European Union Data Protection Regulation
EUI(s)	European Union Institutions(s)
EUIPO	European Union Intellectual Property Office (until 22.3.2016: Office for Harmonization in the Internal Market (Trade Marks and Designs))
Euroseeds	European Seed Association
F	
FRUMATIS	Fruit Reproductive Material Information System
FAO / SDG	Food and Agriculture Organization / Sustainable Development Goals
G	
GAIA	A distinctness support software developed by the French examination office (GEVES)
GDPR	General Data Protection Regulation
GEVES	Groupe d'Étude et de contrôle des Variétés et des Semences / French Variety and Seed Study and Control Group (France)
GNIS	Groupement national interprofessionnel des semences et des plants/ French Association for Seeds and Seedlings (France)
I	
ICT	information communication technology tool
ICTAC	Information and communication technology Advisory Committee of the EU agencies
INIA	Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria/ National Institute for Agricultural and Food Research and Technology (Spain)
InnoVar	H2020 project 'Next generation variety testing for improved cropping on European farmland
INRAE	Institut National de Recherche pour l'Agriculture l'Alimentation et l'Environnement
Invite	H2020 project 'INnovations in plant Varlety Testing in Europe'
IP	intellectual property
IPR(s)	intellectual property rights
IT	information technology
K	
KASpar	A novel homogeneous fluorescent genotyping system from KBioscience
M	
MTA	material transfer agreement
N	
n/a	not applicable
NAKT	Naktuinbouw (Dutch Inspection Service for Horticulture)
NÉBIH	Nemzeti Élelmiszerlánc-biztonsági Hivatal/ National Food Chain Safety Office (Hungary)
NIAB	National Institute of Agricultural Botany (United Kingdom)
0	
OAPI	Organisation Africaine de Protection Intellectuelle/ African Intellectual Property Organisation

Acronym/ini	tialism/ abbreviation
OECD	Organisation for Economic Cooperation and Development
OEVV	Oficina Española de Variedades Vegetales/ Spanish Plant Variety Office (Spain)
OJ	Official Journal of the European Union
P	
PBR	plant breeders' rights
Plantum	Branchevereniging voor de sector zaden en jonge planten / Dutch Association for the Plant Reproduction Material Sector
PMR	plant reproductive material
PVP	plant variety protection
PVR	plant variety rights
Q	
QAS	Quality Audit Service
R	
R&D	research and development
S	
SEA	South-East Asia
SME(s)	Small and Medium Sized Enterprise(s)
SNP	single-nucleotide polymorphism
SPD	Single Programming Document
T	
TLO(s)	technical liaison officer
TP(s)	technical protocol
TQB(s)	technically qualified bodies
U	
UKSUP	Ústredný kontrolný a skúšobný ústav poľnohospodársky/ Central Controlling and Testing Institute in Agriculture (Slovakia)
ÚKZÚZ	Ústředního kontrolního a zkušebního ústavu zemědělsky/ Central Institute for Supervising and Testing in Agriculture (Czechia)
UPOV	International Union for the Protection of New Varieties of Plants
V	
VCU	value for cultivation and use
W	
WOSR	winter oilseed rape
WP	work package



3 boulevard Maréchal Foch • CS 10121 49101 ANGERS CEDEX 2 • FRANCE Tel. +33 (0)2 41 25 64 00 • Fax +33 (0)2 41 25 64 10 cpvo@cpvo.europa.eu • cpvo.europa.eu

CPVO Youtube channel

y @CPVOTweets

in Community Plant Variety Office

Служба на Общността за сортовете растения

Oficina Comunitaria de Variedades Vegetales

Odrůdový úřad Společenství

EF-Sortsmyndigheden

Gemeinschaftliches Sortenamt

Ühenduse Sordiamet

Κοινοτικό Γραφείο Φυτικών Ποικιλιών

Community Plant Variety Office

Office communautaire des variétés végétales

Ured Zajednice za zaštitu biljnih sorti

Ufficio comunitario delle varietà vegetali

Kopienas Augu šķirņu birojs

Bendrijos augalų veislių tarnyba

Közösségi Növényfatja-hivatal

L-Ufficju Komunitarju dwar il-Varjetajiet tal-Pjanti

Communautair Bureau voor plantenrassen

Wspólnotowy Urząd Ochrony Odmian

Instituto Comunitário das Variedades Vegetais

Oficiul Comunitar pentru Soiuri de Plante

Úrad Spoločenstva pre odrody rastlín

Urad Skupnosti za rastlinske sorte

Yhteisön kasvilajikevirasto

Gemenskapens växtsortsmyndighet

