Protecting the world’s plant resources from pests
Protecting the world’s plant resources from pests
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Welcome Message

Lucien Kuamé Konan, Chairperson of the Commission on Phytosanitary Measures

Friends, colleagues and plant health champions from around the world, What a year it has been! Some have compared it to a roller-coaster ride: scary, unpredictable twists and turns, and all of us gripping our seats for safety. This past year has forced all of us to rethink and retool the way we interact and communicate in our personal and professional lives. Certainly, organizations, including the IPPC and its 184 national plant protection organizations (NPPOs) and 10 regional plant protection organizations (RPPOs), have been directly impacted by COVID-19 lockdowns and quarantines. We needed to adapt, and we have done so very well.

Despite the enormous challenges and constraints that were presented to us this past year, the IPPC Secretariat and contracting parties were successful in staying unified, active and effective in delivering key plant health services and programmes. This has allowed global trade in plant commodities to continue in a safe and orderly fashion. We continued to advance the IPPC’s work programme priorities, including standard setting, implementation-related activities, and the various ongoing initiatives such as ePhyto, sea container work, pest communications and the like. Ultimately, our efforts to support essential plant health programmes at national, regional and global levels have allowed us to prevent major transboundary pest infestations at a time when society at large was wholly focused on overcoming the human health threats associated with COVID-19.

This past year, we held the first-ever virtual Commission on Phytosanitary Measures (CPM) meeting. This event, made possible through the Secretariat’s careful planning and savvy use of the latest communication tools, enabled the participation of more than 340 participants from over 106 countries and RPPOs in our April 2021 CPM session. Under Javier Trujillo’s able chairmanship, CPM members came together to adopt a number of important International Standards for Phytosanitary Measures (ISPMs) including: the revision of ISPM 8 (Determination of pest status in an area); a new standard on requirements for the use of modified atmosphere treatments as phytosanitary measures; amendments to the IPPC Glossary of phytosanitary terms; a new standard on requirements for NPPOs to authorize entities to perform phytosanitary actions; and a new CPM Recommendation on the safe provision of food and other humanitarian aid to prevent the introduction of plant pests during an emergency situation.
CPM members also unanimously adopted the new 10-year IPPC Strategic Framework. This framework sets the direction and overall goals and priorities for the IPPC over the next several years. We established various focus groups to develop plans to guide the implementation of the strategic plan, including initiatives associated with the Development agenda, such as climate change, communications and the development of a global mechanism for pest reporting and response.

We need to celebrate the fact that most, if not all, the IPPC committees, working groups, panels, the Bureau and other bodies continued to meet virtually – in some cases more often than in pre-pandemic times – to carry on their work. The Secretariat played an indispensable role in organizing, facilitating and making it possible for all of us to stay connected, stay active and stay on mission. Thank you, Secretariat. Thank you also to the many staff members in contracting parties who participated in meetings very late in the evening and very early in the morning!

In addition to our success in delivering our IPPC work programme priorities, we were by and large successful in organizing and promoting the International Year of Plant Health (IYPH) (originally planned for 2020 but extended into 2021) in a number of countries and regions around the world. The Secretariat and various NPPOs followed through on a wide range of public events, including plant health conferences, a series of press releases, and active promotion and advocacy of plant health programmes – all aimed at increasing public support and understanding of the importance of plant health in our lives. This international year event helped pave the way to a new, more enduring proposal for an international day of plant health, and we are optimistic that the United Nations General Assembly will support this proclamation.

This past year we also bid farewell to two key IPPC community figures who have contributed much of their professional life to the global plant protection cause. We thank Ralf Lopian from Finland for his 25 years of service to the IPPC community. Mr. Lopian served as CPM Chair, on multiple committees, took a leading role in the development of the new strategic framework, and successfully led us in imagining and then securing the United Nations proclamation of the IYPH. We also thank Brent Larson who announced his retirement from the IPPC Secretariat in December 2021. Mr. Larson was a key figure in the Secretariat for many years, playing a lead role in directing and facilitating the development and implementation of IPPC standards. We wish Mr. Lopian and Mr. Larson the very best.

Looking ahead, I wish I could say that 2022 will be easier in terms of managing through the ongoing pandemic crisis. We do not know when we will resume business as usual and return to face-to-face meetings. We do know that challenges in plant health do not stand still and pests do not take a holiday. The need to maintain effective biosecurity and safeguarding systems remains. Growth in movement of sea containers has emerged as an important pathway for hitchhiking pests and contaminants. Climate change is impacting pest biology and the ability of pathogens to spread themselves into new habitats. E-commerce has grown rapidly, creating new opportunities for importing harmful materials that evade normal commercial controls and inspection channels. And we need to continue to work together to harness the plant protection capacities among all NPPOs to ensure a true, global defence against pests.

Despite these challenges, I am confident that the IPPC community will continue to come together to share ideas, develop harmonized approaches and generate strategies for countering pests and safeguarding the world’s plant and food resources. I look forward to working with all of you to advance our shared goals and interests in plant health.

Finally, my heart goes to those of you who have been personally impacted by the pandemic. May you stay healthy and safe in the year ahead.
The landmark year 2021 has undoubtedly proved the value of hope and the possibility of success in the midst of the COVID-19 pandemic. The pandemic will be long remembered for not only its disruptive impacts on the global economy but also on millions of people who have been affected by its accumulative effects. The pandemic is hitting the world’s poorest people hardest, and adding more burden on the realization of the United Nations Sustainable Development Goals (SDGs) for the 2030 Agenda.

Nevertheless, 2021 was a breakthrough year for the International Plant Protection Convention (IPPC) community as it witnessed the convening of the first virtual session of the Commission on Phytosanitary Measures (CPM-15). Adopting innovative and modern approaches effectively contributed to solving these unprecedented challenges and made meeting in a virtual environment a reality.

The International Year of Plant Health (IYPH) was successfully extended into 2021 until its closing ceremony held on 1 July. The event consisted of a high-level segment chaired by the FAO Deputy Director-General Beth Bechdol and with keynote speeches by the FAO Director-General QU Dongyu as well as several Ministers and stakeholders; the distribution of awards for winners of photograph, drawing and video competition; and a panel discussion on the IYPH legacies.
In coping with the COVID-19 emergency, the IPPC ePhyto Solution became an incredible resource to facilitate safe trade, to secure the exchange of phytosanitary certificates and to lower the sanitary risks for the phytosanitary staff working at the border points. More than 100 countries are now registered with the IPPC ePhyto Solution, and 64 countries are exchanging ePhytos in real time, with another 40 countries currently going through the onboarding process.

Despite the COVID-19 pandemic, the IPPC Secretariat has done outstanding work with tangible results achieved, including engagement in communication, coordination and cooperation with over 40 international and regional organizations. The establishment of three CPM Focus Groups on climate change and phytosanitary issues, on implementation of the IPPC Strategic Framework development agenda items, and on communication, marked the start of the implementation of the IPPC Strategic Framework 2020–30.

In 2021, eleven International Standards for Phytosanitary Measures (ISPMs) were adopted, including phytosanitary treatments. Seven virtual IPPC Regional Workshops to strengthen capacities of the contracting parties were organized, which were attended by 501 participants from 140 contracting parties.

The IPPC Secretariat also published three IPPC guides in 2021: Fall armyworm prevention, preparedness and response (also available as an e-book), Pest Status, and Surveillance, complementing and contributing to the comprehensive training set available to RPPOs and NPPOs and forming new reference materials for the IPP Phytosanitary System Component pages. Another moment event was the signing of a Memorandum of Understanding with the Comité de Liaison Europe-Afrique-Caraïbe-Pacifique (COLEACP), a non-profit organization dedicated to developing sustainable trade in fruit, vegetables and food products.

On behalf of the IPPC Secretariat, I would like to express my sincere gratitude for the strong support and positive contribution to the IPPC work programme by the IPPC contracting parties, regional plant protection organizations and other relevant partners. 2022 will be an extraordinary year for all of us as we should move in steady steps towards the implementation of FAO Strategic Framework 2022–2031 and IPPC Strategic Framework 2020–2030.

I look forward to your continued support and dedication to the IPPC mission: “Protecting Global Plant Resources and Facilitating Safe Trade”.

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The International Plant Protection Convention (IPPC) Secretariat would like to recognize all experts, members of the Commission on Phytosanitary Measures (CPM), governing and subsidiary bodies, technical panels and advisory bodies, as well as the contracting parties and partners for their active participation in, and positive contribution to, the IPPC work programme.

**IPPC Multi-Donor Trust Fund contributions received in 2021**

The IPPC Secretariat recognizes the following nine contracting parties and organizations that have provided financial support to the IPPC Multi-Donor Trust Fund in 2021. These contributions were essential for the IPPC Secretariat to deliver the IPPC work programme in 2021.

<table>
<thead>
<tr>
<th>Contracting parties and organizations</th>
<th>Amount (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>155 340</td>
</tr>
<tr>
<td>Canada</td>
<td>181 388</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>207 034</td>
</tr>
<tr>
<td>United States of America/North American Plant Protection Organization (NAPPO)</td>
<td>100 000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>643 762</strong></td>
</tr>
</tbody>
</table>

© Sebastian Liste
In-kind contributions

The IPPC Secretariat wishes to recognize the following contracting parties and organizations for their in-kind contributions in the form of staff, staff time (expertise) or meeting support. These contributions make it possible for the IPPC Secretariat to deliver the IPPC work programme.

<table>
<thead>
<tr>
<th>CONTRACTING PARTIES AND ORGANIZATIONS</th>
<th>Activities (work areas)</th>
<th>Types of contribution (staff time, meeting support)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTIGUA AND BARBUDA</td>
<td>IPPC Network</td>
<td>Meeting support for the IPPC Regional Workshop for the Caribbean</td>
</tr>
<tr>
<td>APPPC</td>
<td>IPPC Network</td>
<td>Meeting support for the IPPC Regional Workshop for Asia</td>
</tr>
<tr>
<td>AUSTRALIA</td>
<td>Trade Facilitation</td>
<td>Staff time of two officers for ePhyto activities</td>
</tr>
<tr>
<td>AU–IAPSC</td>
<td>IPPC Network</td>
<td>Meeting support for the IPPC Regional Workshop for Africa</td>
</tr>
<tr>
<td>BRAZIL</td>
<td>Standard setting</td>
<td>Standard Setting Unit (SSU) work on governance, expert working groups, technical panel on diagnostic protocols (TPDP), and some development agenda items of the IPPC Strategic Framework. Also, to support the IST on the CPM Focus Group on Climate Change and Phytosanitary issues.</td>
</tr>
<tr>
<td>CAHFS A</td>
<td>IPPC Network</td>
<td>Meeting support for the IPPC Regional Workshop for the Caribbean</td>
</tr>
<tr>
<td>CAN</td>
<td>IPPC Network</td>
<td>Meeting support for the virtual IPPC Regional Workshop for Latin America and translation of IPPC regional workshop material into Spanish</td>
</tr>
<tr>
<td>CANADA</td>
<td>Trade Facilitation</td>
<td>Staff time for e-Commerce Coordinator (100%) for 12 months and associated travel for the officer</td>
</tr>
<tr>
<td>CHINA</td>
<td>Trade facilitation</td>
<td>Staff time of one officer (25%) for ePhyto activities</td>
</tr>
<tr>
<td>COLEACP</td>
<td>Implementation Facilitation</td>
<td>Translation of eight IPPC guides in French</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Staff time to edit the training material for the e-Learning courses on Pest Risk Analysis and Export Certification</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Staff time to develop the IT version of the e-Learning courses</td>
</tr>
<tr>
<td>MEXICO</td>
<td>IPPC Network</td>
<td>Meeting support for the virtual IPPC Regional Workshop for Latin America</td>
</tr>
<tr>
<td>COSAVE</td>
<td>IPPC Network</td>
<td>Meeting support for the virtual IPPC Regional Workshop for Latin America</td>
</tr>
<tr>
<td>EGYPT</td>
<td>Trade facilitation</td>
<td>Staff time of one officer (25%) for ePhyto activities</td>
</tr>
<tr>
<td>CHILE</td>
<td>Trade facilitation</td>
<td>Staff time of one officer (25%) for ePhyto activities</td>
</tr>
<tr>
<td>EPPO</td>
<td>IPPC Network</td>
<td>Meeting support for the IPPC Regional Workshop for Europe and Central Asia</td>
</tr>
<tr>
<td>EUROPEAN COMMISSION</td>
<td>Trade facilitation</td>
<td>Staff time of one officer (25%) for ePhyto activities</td>
</tr>
<tr>
<td>FAO KENYA</td>
<td>IPPC Network</td>
<td>Meeting support for the IPPC Regional Workshop for Africa</td>
</tr>
<tr>
<td>FAO REGIONAL OFFICE FOR AFRICA</td>
<td>IPPC Network</td>
<td>Meeting support for the IPPC Regional Workshop for Africa</td>
</tr>
<tr>
<td>FAO REGIONAL OFFICE FOR EUROPE</td>
<td>IPPC Network</td>
<td>Meeting support for the IPPC Regional Workshop for Europe and Central Asia</td>
</tr>
<tr>
<td>FAO REGIONAL OFFICE FOR NEAR EAST</td>
<td>IPPC Network</td>
<td>Meeting support for the IPPC Regional Workshop for the Near East and North Africa</td>
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<tr>
<td>FAO SUB-REGIONAL OFFICE FOR THE CARIBBEAN</td>
<td>IPPC Network</td>
<td>Meeting support for the IPPC Regional Workshop for Caribbean</td>
</tr>
<tr>
<td>FRANCE</td>
<td>Implementation Facilitation</td>
<td>Staff time of one officer from January to June (50%) for Implementation Facilitation and ePhyto</td>
</tr>
<tr>
<td>KENYA</td>
<td>Trade facilitation</td>
<td>Staff time of one officer (25%) for ePhyto activities</td>
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<td></td>
<td>IPPC Network</td>
<td>Meeting support for the IPPC Regional Workshop for Africa</td>
</tr>
<tr>
<td>LEBANON</td>
<td>IPPC Network</td>
<td>Meeting support for the IPPC Regional Workshop for the Near East</td>
</tr>
<tr>
<td>REPUBLIC OF MOLDOVA</td>
<td>IPPC Network</td>
<td>Meeting support for the IPPC Regional Workshop for Europe and Central Asia</td>
</tr>
<tr>
<td>OIRSA</td>
<td>IPPC Network</td>
<td>Meeting support for the virtual IPPC Regional Workshop for Latin America</td>
</tr>
<tr>
<td>PPPO</td>
<td>IPPC Network</td>
<td>Meeting support for the IPPC Regional Workshop for the South West Pacific</td>
</tr>
<tr>
<td>REPUBLIC OF KOREA</td>
<td>IPPC Network</td>
<td>Meeting support for the IPPC Regional Workshop for Asia</td>
</tr>
<tr>
<td>UNITED STATES OF AMERICA</td>
<td>IPPC Network</td>
<td>Staff time of one officer (100%) for one year supporting governance, communication, IYPH legacies and network activities</td>
</tr>
<tr>
<td></td>
<td>Trade Facilitation</td>
<td>Staff time of one officer (50%) for ePhyto activities</td>
</tr>
</tbody>
</table>

Note: Associate Professional Officers and direct staff support is shown in Projects section of the Acknowledgements.
### IPPC projects implemented in 2021

The IPPC Secretariat recognizes the support from donors that made it possible to successfully implement the following projects in 2021.

<table>
<thead>
<tr>
<th>PROJECT TITLE</th>
<th>DONOR</th>
<th>PERIOD</th>
<th>BUDGET AMOUNT FOR 2021 (USD)</th>
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</thead>
<tbody>
<tr>
<td>Rolling out Systems Approach globally</td>
<td>STDF</td>
<td>1 Jul 2018 – 30 Jun 2021</td>
<td>259 099</td>
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<td>Support for implementation of the International Plant Protection Convention (IPPC)</td>
<td>European Commission</td>
<td>1 Jan 2020 – 31 Dec 2022</td>
<td>351 740</td>
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<tr>
<td>Commodity and pathways standards, pest outbreak and alert and response systems, and ePhyto</td>
<td>European Commission</td>
<td>1 Jul 2020 – 30 Jun 2023</td>
<td>315 654</td>
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<tr>
<td>Strengthening the capacity of developing contracting parties to implement the IPPC</td>
<td>China</td>
<td>24 Feb 2017 – 31 Dec 2023</td>
<td>683 328</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>1 821 108</strong></td>
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<table>
<thead>
<tr>
<th>PROJECT TITLE</th>
<th>DONOR</th>
<th>PERIOD</th>
<th>BUDGET AMOUNT FOR 2021 (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate Professional Officer China</td>
<td>China</td>
<td>3 Sep 2018 – 2 Mar 2021</td>
<td>84 743</td>
</tr>
<tr>
<td>Associate Professional Officer Finland</td>
<td>Finland</td>
<td>15 Apr 2020 – 14 Apr 2022</td>
<td>158 037</td>
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<tr>
<td>Secondment programme Japan</td>
<td></td>
<td>1 Oct 2020 – 30 Sep 2025</td>
<td>200 047</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>442 827</strong></td>
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</tbody>
</table>

Overall budget of IPPC projects implemented in 2021: **USD 2 263 935.**
The IPPC Secretariat

Acknowledgement is given to the IPPC Secretariat staff for their dedication and commitment to the delivery of the IPPC work programme.

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Budget and Planning Officer

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Standard Setting Unit Leader

Adriana Moreira
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Deputy to Unit Leader

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Standard Setting Officer

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(In-kind Contribution)

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Deputy to Unit Leader

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Barbara Peterson
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Fitzroy White
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Natalie Nicora
Integration and Support Team Assistant

Note: The staff listed covers those who worked in the IPPC Secretariat for at least three months between 1 January and 31 December 2021. During 2021, Jingyuan Xia, Director of FAO Plant Production and Protection Division acted as Officer-in-Charge for the IPPC Secretary and Avetik Nersisyan acted as Officer-in-Charge for the IPPC Secretary in charge of daily matters.

*Left in 2021
# Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
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<tbody>
<tr>
<td>APPPC</td>
<td>Asia and Pacific Plant Protection Commission</td>
</tr>
<tr>
<td>AWS</td>
<td>Amazon Web Service</td>
</tr>
<tr>
<td>BWC</td>
<td>Biological Weapons Convention</td>
</tr>
<tr>
<td>CAHFSA</td>
<td>Caribbean Agriculture Health and Food Safety Agency</td>
</tr>
<tr>
<td>CAN</td>
<td>Comunidad Andina</td>
</tr>
<tr>
<td>CBD</td>
<td>Convention on Biological Diversity</td>
</tr>
<tr>
<td>COLEACP</td>
<td>Europe-Africa-Caribbean-Pacific Liaison Committee</td>
</tr>
<tr>
<td>COMESA</td>
<td>Common Market for Eastern and Southern Africa</td>
</tr>
<tr>
<td>COP</td>
<td>Conference of Parties</td>
</tr>
<tr>
<td>COSAVE</td>
<td>Comité de Sanidad Vegetal del Cono Sur</td>
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<tr>
<td>CPM</td>
<td>Commission on Phytosanitary Measures</td>
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<tr>
<td>CPM-15</td>
<td>Fifteenth Session of the Commission on Phytosanitary Measures</td>
</tr>
<tr>
<td>D</td>
<td>Diagnostic Protocol</td>
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<tr>
<td>EPPO</td>
<td>European and Mediterranean Plant Protection Organization</td>
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<td>EWG</td>
<td>Expert Working Group</td>
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<tr>
<td>ESG</td>
<td>ePhyto Steering Group</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
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<td>FAW</td>
<td>Fall armyworm</td>
</tr>
<tr>
<td>FG</td>
<td>Focus group</td>
</tr>
<tr>
<td>G</td>
<td>General Agreement on Tariffs and Trade</td>
</tr>
<tr>
<td>GIZ</td>
<td>Deutsche Gesellschaft für Internationale Zusammenarbeit</td>
</tr>
<tr>
<td>I</td>
<td>International Atomic Energy Agency</td>
</tr>
<tr>
<td>IAG</td>
<td>Industry Advisory Group</td>
</tr>
<tr>
<td>IAPSC</td>
<td>Inter-African Phytosanitary Council</td>
</tr>
<tr>
<td>IC</td>
<td>Implementation and Capacity Development Committee</td>
</tr>
<tr>
<td>ICD</td>
<td>Implementation and Capacity Development</td>
</tr>
<tr>
<td>IDPH</td>
<td>International Day of Plant Health</td>
</tr>
<tr>
<td>IIICA</td>
<td>Inter-American Institute for Cooperation on Agriculture</td>
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<tr>
<td>IMO</td>
<td>International Maritime Organization</td>
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<tr>
<td>IPPC</td>
<td>International Plant Protection Convention</td>
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<tr>
<td>IPSA</td>
<td>Instituto de Protección y Sanidad Agropecuaria</td>
</tr>
<tr>
<td>ISPM</td>
<td>International Standards for Phytosanitary Measures</td>
</tr>
<tr>
<td>IYPH</td>
<td>International Year of Plant Health</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>MDF</td>
<td>Multi-Donor Trust Fund</td>
</tr>
<tr>
<td>NAPPO</td>
<td>North American Plant Protection Organization</td>
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<tr>
<td>NEPPO</td>
<td>Near East and North Africa Plant Protection Organization</td>
</tr>
<tr>
<td>NPPO</td>
<td>National Plant Protection Organizations</td>
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<td>NRO</td>
<td>National Reporting Obligations</td>
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<td>NSP</td>
<td>Plant Production and Protection Division of FAO</td>
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<td>OCS</td>
<td>Online Comment System</td>
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<tr>
<td>OIRSA</td>
<td>Organismo Internacional Regional de Sanidad Agropecuaria</td>
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<td>OIE</td>
<td>World Organisation for Animal Health</td>
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<td>PCE</td>
<td>Phytosanitary Capacity Evaluation</td>
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<td>PPPO</td>
<td>Pacific Plant Protection Organization</td>
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<td>PT</td>
<td>Phytosanitary Treatment</td>
</tr>
<tr>
<td>PWC</td>
<td>Price Waterhouse Cooper</td>
</tr>
<tr>
<td>RPPO</td>
<td>Regional Plant Protection Organizations</td>
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<tr>
<td>SBI</td>
<td>Subsidiary Body on Implementation</td>
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<tr>
<td>SBSTTA</td>
<td>Subsidiary Body on Scientific, Technical and Technological Advice</td>
</tr>
<tr>
<td>SC</td>
<td>Standards Committee</td>
</tr>
<tr>
<td>SCTF</td>
<td>Sea Containers Task Force</td>
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Executive summary

The year 2021, despite all the challenges, was a successful one for the IPPC Secretariat and IPPC community. It marked the historic, virtual hosting of the Fifteenth Session of the CPM and the closing ceremony of the International Year of Plant Health (IYPH), while ensuring that standard setting and implementation activities continued in the best possible manner.

Thanks to strong support from all relevant stakeholders, the IPPC Secretariat managed to deliver its services in the highest professional manner and to serve its stakeholders globally, regionally and nationally. The year 2022 is expected to bear various challenges in the implementation of the Convention, which can be overcome with the IPPC community’s continued support and dedication to the IPPC mission.
This report includes the outstanding achievements by the IPPC Secretariat in 2021.

**Commission on Phytosanitary Measures (CPM) and subsidiary bodies.** The IPPC Secretariat continued to support IPPC governance despite the pandemic's ongoing impact to travel and the organization of in person meetings throughout 2021. CPM-15 took place on 16, 18 March and 1 April 2021, allowing the IPPC community to advance IPPC work after the cancellation of the CPM in 2020. More than 340 participants attended this historic session, approving 11 standards, establishing 3 focus groups and electing the new CPM Chairperson, among other achievements. The CPM Bureau met on a monthly basis during 2021, with the support of the IPPC Secretariat, which also facilitated 2 meetings of the IPPC Financial Committee, 7 meetings of the Standards Committee (SC), 8 meetings of the Implementation and Capacity Development Committee (IC) and the tenth session of the Strategic Planning Group (SPG), all by virtual means.

**CPM Focus Groups.** CPM-15 established three focus groups to advance the implementation of IPPC work and, specifically, on the implementation of the Strategic Framework 2020–2030 development agenda items, climate change and phytosanitary issues, and communications. Each CPM Focus Group (FG) organized six meetings in 2021, for a total of eighteen meetings, and planned to meet every three weeks on average during 2022 to advance their work in accordance with their respective terms of reference. The CPM Focus Group on Pest Outbreaks Alert and Response Systems met virtually on a monthly basis from January to September 2021. Ten additional presentation sessions on existing systems and up to 20 subgroup meetings were also organized.

**Standard setting.** In addition to the previously mentioned SC meetings, and to keep focus on the high quality of the IPPC International Standards for Phytosanitary Measures (ISPMs), the SC used the Online Comment System (OCS) to revise and approve eight draft standards for first and second consultation. They also approved six draft Phytosanitary Treatments (PTs) and one draft Diagnostic Protocol (DP) for consultation via eDecision. Additionally, the SC approved Specification 72 on the reorganization of Pest Risk Analysis standards, with the aim of improving and facilitating the implementation of such an important and fundamental topic for plant health. On behalf of the CPM, the SC also adopted DP 30 for Striga spp. The work of the Technical Panel on Phytosanitary Treatments (TPPT), the Technical Panel on Diagnostic Protocols (TPDP) and the Technical Panel for the Glossary (TPG) progressed virtually throughout the year. Two expert working groups (EWGs) met to draft text on the Use of Specific Import Authorizations and an Annex to ISPM 38 (International movement of seeds).

**Implementation and Capacity Development (ICD).** In 2021, beyond the eight meetings scheduled to discuss and advance the issues under its mandate, the IC worked to move forward the priority topics of the ICD list in Topics. Six specifications for implementation materials were developed, sent for consultation and approved by the IC. The IC also worked to finalize the three IPPC guides that were published this year (Pest status, Surveillance (revised guide) and Fall armyworm prevention, as well as the review of the modules of the eLearning courses (Pest Risk Analysis (PRA) and export certification).

Through the three IC sub-groups and eight IC teams, the IC contributed to advancing issues such as the modernization of the Phytosanitary Capacity Evaluation (PCE), sea containers, sustainability of IRSS, international collaboration on e-Commerce, Fusarium wilt TR4, etc. The IC also contributed in finalizing the phytosanitary component pages that will allow contracting parties to have the resources (ISPMs, guides, contributed resources, etc.) related to phytosanitary components all in one place.

**IPPC Networks.** Seven IPPC Regional Workshops were organized in 2021. Two virtual sessions of the 33rd Technical Consultation among Regional Plant Protection Organizations (TC-RPPO) took place, with a third virtual meeting scheduled for February 2022.

**ePhyto Solution.** As of December 2021, 104 IPPC contracting parties are registered with the IPPC ePhyto Solution and, in early 2021, the ePhyto hub passed the mark of one million ePhyto certificates exchanged. The system is averaging a little more than one hundred thousand certificate exchanges each month (and was built to be able to exchange that number per day).

**2021 Call for Topics: Standards and Implementation.** The 2021 Call for Topics was opened from 4 May to 15 September 2021. In June 2021, the IPPC Secretariat organized a webinar on the Call to help contracting parties and RPPOs enhance the quality of new proposals to be included in the IPPC work programme. In addition, the Secretariat also developed the automatic online submission forms for the Call to simplify
and accelerate the submission process, increase the quality of the topic proposals, ensure there are no omissions in mandatory sections, establish the database with all submissions and reduce the workload on the relevant stakeholders. By the end of the Call, the Secretariat received 17 topic submissions (7 standards, 3 implementation resources and 7 diagnostic protocols) from 8 contracting parties and 2 regional plant protection organizations (RPPOs). Furthermore, 3 Task Force on Topics virtual meetings were undertaken in 2021 to streamline the Call process and to evaluate the topic submissions.

The International Year Plant Health (IYPH) 2020 legacy. The IYPH came to a close on 1 July 2021, with a high-level event that saw the participation of the FAO Director-General, video messages from ministries and various others. The IYPH International Steering Committee1 met for the last time on 2 July 2021, underlining the many IYPH achievements and suggesting a way forward to continue promoting plant health globally through its legacies. The IPPC Secretariat coordinated and followed up on the publication of the Scientific Review of the Impact of Climate Change on Plant Pests, the proclamation of the International Day of Plant Health by the United Nations General Assembly and the first International Plant Health Conference, originally scheduled on 28 June to 1 July 2020 and now expected to take place in 2022. The IPPC Secretariat proposed, organized and supported two events paving the way to the International Plant Health Conference: a side event to the World Food Forum and a webinar on Remote Sensing in Plant Health, with the support of the European and Mediterranean Plant Protection Organization (EPPO), Euphresco, the European Space Agency and Eurisy.

Communications and advocacy. The IPPC Secretariat’s visibility and impact were enhanced with the production of over 80 IPPC publications, the posting of 93 IPPC news items, 103 announcements, and a number of videos and social media posts. A separate report is presented to CPM-16 on IPPC communications and advocacy.

International cooperation. External cooperation was maintained with 42 international and regional organizations.

Resource mobilization. Despite the pandemic, donations to the IPPC Multi-Donor Trust Fund (MDTF) were similar to 2020 levels, with approximately USD 650,000 received in 2021. Three IPPC projects were funded by the European Union, one by the Standards and Trade Development Facility (STDF) and one by China. The IPPC Secretariat implemented the phytosanitary components of other FAO projects, and a new project by a new donor (World Bank) was funded in 2021 for the Southern Africa (Common Market for Eastern and Southern Africa (COMESA)) trade facilitation programme. Additionally, the IPPC Secretariat signed a new project with another new donor (the German cooperation agency – Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)) that will start in 2022.

Internal management. In August 2020, Jingyuan Xia, IPPC Secretary, was promoted to the position of Director of the FAO Plant Production and Protection Division (NSP). Mr Xia remained Officer-in-Charge of the IPPC Secretariat throughout 2021, while Avetik Nersisyan, Senior Standard Setting Officer, became Officer-in-Charge for daily matters until the new Secretary is selected. Adjustments were also made in the Standard Setting Unit (SSU) due to this new arrangement and staffing resources. The IPPC Management Team started implementing recommendations from a staff survey carried out in the previous year to enhance workplace teamwork, effectiveness and efficiency. Some implemented actions included the establishment of an IPPC Secretariat gender group, expansion of the IPPC Secretariat Management Team to ensure more staff representation and the continued annual staff meetings.

1 Ref. IYPH ISC page: https://www.ippc.int/en/ph/iyphisc/
In relation to the International Year of Plant Health (IYPH) 2020 organized opened for consultation periods in July 2021 to gather comments from contracting parties and RPPOs.

**Highlights**

**Draft**
- **5 global events** in relation to the International Year of Plant Health (IYPH) 2020 organized
- **15 international standards**
- **1 Specification**
- **1 CPM Recommendation**

**Adopted**
- **7 implementation and capacity development documents**
- **13 international standards** including seven phytosanitary treatments
- **2 Diagnostic protocols (DPs)**
- **1 CPM Recommendation**

**104 countries** registered with the IPPC ePhyto Solution and the ePhyto hub reached **1 million certificate exchanges in May 2021**

**8 IPPC projects** proceeded virtually
IPPC Guides published in 2021:
*Fall armyworm prevention, preparedness and response* (also available as an e-book)
*Pest Status and Surveillance*, complementing and contributing to the comprehensive training set available to RPPOs and NPPOs and forming new reference materials for the IPP Phytosanitary System Component pages

3 workshops

Workshops

7 regional

2 virtual sessions

of the 33rd TC-RPPO meeting took place, helping to strengthen collaboration within the IPPC community

5 ePhyto virtual workshops

hosted by the ePhyto Industry Advisory Group (IAG) and supported by the IPPC Secretariat, were held together with the NPPOs to help facilitate conversations between importers, exporters, trade associations and NPPOs on the benefits of adopting the IPPC ePhyto Solution and the use of the Hub or GeNS

643,762 USD

in funding

in funding to the IPPC Multi-Donor Trust Fund (MDTF) was received from four contracting parties

29 contracting parties

42 international and regional organizations

made in-kind contributions to the IPPC Secretariat
Standard setting

A new look and reorganization of IPPC pest risk analysis standards

Pest risk analysis being one of the most important principles of the IPPC, it is of particular importance to have a comprehensive overview of all information related to conducting a PRA in one ISPM. The SC approved the Specification for the reorganization of the PRA standards to ensure that guidance is provided in a consistent way, and decided it was time to expand on the information provided on pest risk management as the last stage of the PRA.

SSU in numbers

- 64 topics for Internationals Standards for Phytosanitary Measures (ISPMs) were overseen by the Standards Committee and managed by the IPPC Standard Setting Unit
- 7 draft phytosanitary treatments progressed in the standard setting process
- 3 draft diagnostic protocols progressed in the standard setting process
- +5 500 comments received from contracting parties, RPPOs and the private sector during ISPM consultations
- 22 meetings prepared and successfully delivered on the development of international standards for phytosanitary measures
- 2 webinars organized, in 4 different sessions
- +25 SC members supported
- 26 technical panel members supported
- +40 authors of diagnostic protocols supported
- 31 EWG experts participated in the IPPC Standard Setting Process (2021 Expert working groups)
- 6 calls for experts, DP authors and topics launched and managed
- 17 submissions received at the 2021 IPPC Call for Topics
- 1st time ever online submission forms for IPPC topics proposals
- 25 e-decisions managed
- 4 Language Review Groups coordinated (Arabic, Chinese, Russian, Spanish)
- 7.5 staff: technical and support staff
2021 Call for Topics: Standards and Implementation

First time ever Call for Topics with a new format for submissions: automated online submission forms! They simplified and accelerated the submission process, increased the quality of the topic proposals, ensured there were no omissions in mandatory sections, established the database with all submissions and reduced workloads for relevant stakeholders.

First commodity standard submission: Annex International movement of mango (*Mangifera indica*) fruit to ISPM XX (Commodity-based standards for phytosanitary measures).

First IPPC webinar on 2021 IPPC Call for Topics was organized to help CPs and RPPOs to enhance the quality of new proposals to be included in the IPPC work programme.

Setting standards in virtual mode

Despite complexities of working virtually when developing international standards, the Standard Setting Unit (SSU) of the IPPC Secretariat coordinated two expert working groups (under the oversight of the SC) based on continuous improvement of the work: the revision of ISPM 4 and a new draft annex to ISPM 38.

In preparation for the development of its work plan to implement the 2020–2030 IPPC Strategic framework, the IPPC Standards Committee (SC) advanced their discussions through small working groups of SC members meeting for virtual brainstorming sessions to provide ideas and input into the development of a work plan.

For more information on the work of the Standard Setting Unit, visit https://www.ippc.int/en/core-activities/standards-setting/.

Streamlining the IPPC standard setting process, while ensure quality and transparency

The SC undertook and in-depth review of its work programme and the List of topics for IPPC standards, and reviewed pending topics to refocus its efforts to the most relevant priorities of the IPPC contracting parties. They also proposed adjustments to the Standard Setting Procedure in order to streamline the development of phytosanitary treatments. The amendment will allow for the adoption of new phytosanitary treatments after only one country consultation if no significant issues are raised.
Implementation and capacity development

Successful project implementation

In 2021, the IFU managed eight projects with a total value of over USD 7 million. The IPPC Secretariat relies strongly on extrabudgetary funds through projects, and was grateful to receive the generous support of the European Union, China, Japan, the Standard Trade and Development Facility (STDF), the Common Market for Eastern and Southern Africa (COMESA) Secretariat and the World Bank. To deliver on the extensive project plan with quality products, and to meet procedural requirements, the team has grown significantly and now includes, in addition to its usual staff, qualified consultants from all over the world.

The Implementation and Capacity Development Committee (IC) has, to ensure transparency and consistency with the IPPC Secretariat’s frequently updated List of topics, been extensively involved in all stages of projects implemented by the IFU. A concrete example is the e-Learning course developed within the COMESA project, which followed the IC Process for the Development of IPPC Implementation and Capacity Development Guides and Training Materials and, in 2022, will be available to all contracting parties. Although meeting the requirements of donors while reflecting the needs of all contracting parties by keeping them fully aligned to the IPPC Secretariat’s vision, mission and strategic objectives can at times be challenging, strong efforts have been made to align the content of projects with the IPPC Strategic Framework 2020–2030. The European Commission’s support to the Strategic Framework, for instance, closely follows the activities of three development agenda items: strengthening pest outbreak alert and response systems, harmonization of electronic data exchange, and commodity- and pathway specific ISPMs.

Each individual IFU project now has a dedicated webpage, increasing transparency and clearly describing deliverables.
Increased visibility and renewed focus on communications

2021 saw the start of a renewed focus on communications for ICD, with an aim to facilitate access and understanding of implementation materials and tools available for the IPPC Community to consult and use. Webinars were one of the main channels used in 2021, closely reflecting the needs and requests of our contracting parties. A full agenda was organized: a three-part series on fall armyworm prevention and preparedness, and single-session webinars on new Guides and Training Materials, the FAO–COLEACP partnership (including e-learning) and a review of the Implementation Review and Support System (IRSS). These webinars were interactive, using chat and Q&A boxes and sessions, as well as zoom polls. With an average of over 200 participants per webinar, and an increase in participants downloading the relevant guides and tools on the IPP website, the IFU will continue organizing webinars on priority topics in 2022. These webinars represent a way for the IPPC Secretariat to engage directly with the target audience on the Guides and get direct feedback.

In addition, the Phytosanitary System page on the IPP website was published, with relevant resources now grouped together for each component of the phytosanitary system. For each topic, key elements including ISPMs, CPM Recommendations, IPPC Guides and training materials, as well as technical resources contributed by NPPOs, RPPOs and other organizations are now easily accessible in one place. The Phytosanitary System page on Systems Approach was updated to introduce the Systems Approach online tools developed under the “Rolling out Systems Approach Globally” project, funded by the STDF.
Growing our training guides and materials offering

Three IPPC Guides were published in 2021: *Fall armyworm prevention, preparedness and response* (also available as an e-book), *Pest Status and Surveillance*, complementing and contributing to the comprehensive training set available to RPPOs and NPPOs, and forming new reference materials for the IPP Phytosanitary System Component pages. These guides provide accurate and easy to understand technical information that is intended to build national phytosanitary capacities. They also provide a basis for developing national legislation, policies and procedures, and highlight best practices to help NPPOs establish and operate effective phytosanitary systems. Particular thanks goes to the strong support and commitment of experts participating in working groups, adding additional commitments to their busy schedules and whose role was crucial when developing quality training materials.

Fall armyworm threatens global food security as it can cause unprecedented impacts to several key crops, including maize, sorghum and rice, if not managed properly. The *Fall armyworm prevention, preparedness and response* guidelines aim to help NPPOs take appropriate actions against fall armyworm (FAW) to ensure timely detection and to prevent or slow the spread of the pest and reduce its negative impact. This publication is also available as an e-book. More information on fall armyworm can be found in the Emerging Pests part of the Annual report.

The *Pest status* guide describes the steps that NPPOs should follow when determining the status of a pest within their territories, and provides guidance on gathering and evaluating information, assessing sources of uncertainty, and how to use pest records and other relevant information to determine whether a pest is present or absent, and to select the appropriate pest status category, as per ISPM 8.

Surveillance is a key activity undertaken by NPPOs to implement the International Plant Protection Convention. The *Surveillance* guide provides guidance on the establishment and operation of a national plant pest surveillance programme and supports implementation of ISPM 6.

Considerable progress was made in securing in-kind translations of these three new guides. The fall armyworm guide has been published in Arabic, English, French and Russian; the Pest status guide is being translated into French and Spanish, and the *Surveillance* guide is being translated to Spanish. These translations depend on support from contracting parties, international organizations and other partners. Potential collaborators are asked to contact the IPPC Secretariat (ippc@fao.org) to discuss their interest in helping to translate a particular guide or training material into other FAO languages.
Facilitating safe trade

How does the IPPC facilitate safe trade?

The IPPC seeks to enhance cooperation among its contracting parties to prevent the international spread of pests of plants and plant products, without creating unnecessary barriers to transport and trade. It continues to facilitate safe and harmonized trade through the development and implementation of international phytosanitary standards, developing capacity, fostering international cooperation and partnerships, and many other activities. Important work with trade-related topics, such as electronic phytosanitary certification, commodity and pathway standards, e-commerce and sea containers, has increased in recent years, and 2021 was no exception.
ePhyto activity has grown decisively in 2021 and amazing things keep happening with the IPPC ePhyto Solution. As of December 2021, 104 IPPC contracting parties have registered with the IPPC ePhyto Solution. The IPPC ePhyto Solution is a prime example of governments, industry and international organizations working together to build an inexpensive, efficient and money-saving tool to facilitate trade for any IPPC contracting party wishing to do so. Beyond that, the development of the IPPC ePhyto Solution can be used as a guide, and even a tool itself, for other international organizations wishing to avail themselves of the opportunity to have a system to replace paper certificates with digital certificate exchanges.

Country implementation case stories. With the onboarding of many registered countries still to take place, a great learning tool for those IPPC contracting parties still deciding how best to approach ePhyto is through a review of the detailed country implementation case studies available on the www. ephytoexchange.org webpage. Both developing and developed countries alike have contributed detailed information about the processes they undertook to establish their respective relationships with the IPPC ePhyto Solution. The case studies include contact information for the representatives of the individual countries that provided the information, which is another characteristic of the unique and positive nature of the ePhyto Solution. Both GeNS countries and those with national systems alike have had no reservations in stepping up to assist new joiners to the ePhyto Solution with their on-boarding process. The Secretariat encourages not only contracting party NPPOs to review these valuable documents, but also veterinary and food safety organizations who are contemplating electronic certification.

Industry Advisory Group (IAG) workshops with NPPOs. Despite the pandemic preventing opportunities to meet face to face, the Secretariat managed to conduct a series of workshops and webinars with representatives of the ePhyto Industry Advisory Group. Regional webinars were held for Eastern Europe and Central Asia, the Near East and North Africa, and the Southern African Region in cooperation with the FAO regional offices in Budapest, Cairo and Harare. Individual national events took place in Bahamas, China, Costa Rica, Côte d’Ivoire, Dominican Republic and Republic of Korea. These events provided an opportunity for all participants, both from industry and government, to learn about the IPPC ePhyto Solution from all angles: the IPPC side, the technical side and the industry side. The partnership with the Industry Advisory Group is representative of the unique nature of the ePhyto Solution in that both government and industry have a vested interest in the programme’s success because of the benefits the Solution offers. For industry, it lowers the cost of doing trade. Case studies have shown a reduction in demurrage charges, decreased use of express shippers for sending the paper certificate and improved efficiency and speed of the trading process. For governments, the ePhyto Solution also increases efficiency at ports and, at the same time, reduces the risk of harmful pests by reducing the incidence of fraudulent paper certificates.

Electronic phytosanitary certificates (ePhyto)
**Partnerships.** The success of the ePhyto Solution thus far is in no small part due to the work of the Secretariat with various partners, especially with the Global Alliance for Trade Facilitation (GATT). The Alliance is a key partner for the Secretariat in implementing the ePhyto Solution in developing and less developed countries. A soon-to-be-completed Letter of Intent will further strengthen this relationship, which has also facilitated access to funding from Germany’s GIZ for a PCE in Senegal. Alliance projects have been conducted, are being conducted or will soon be conducted in countries as diverse as Fiji, Jordan, Madagascar, Morocco and Nigeria, among others. The Alliance is unique in that it brings together a coalition of both government and the private sector to introduce, implement and train in the use of the IPPC ePhyto Solution, becoming a virtual extension of the Secretariat and the United Nations International Computing Centre (UNICC). The combination of the Alliance, the IPPC Secretariat ePhyto Team and our information technology providers, the UNICC, has resulted in a globally unique combination of international organizations, individual governments and the private sector working together seamlessly to provide an enhanced and improved trade environment for both producers and consumers of plants and plant products. The Alliance has been at the forefront of proposing and facilitating enhancements, such as eSignature and the translation into Arabic of the ePhyto Solution, as well as compensating for the lack of resources available to the IPPC by taking the initiative, in partnership with the IPPC, to foster ePhyto uptake in several important countries around the world.

**Translation of the Generic ePhyto National System (GeNS).** In 2021, a huge step forward was taken with the translation into French of the web-based GeNS. This will be particularly useful in facilitating the onboarding of French-speaking countries in Africa. A number of countries in Africa previously requested a French translation; this is another example of the Secretariat’s beneficial partnership with the Global Alliance, as they have ePhyto-trained French-speakers working on their ePhyto projects in French-speaking Africa. Beyond French, however, the Alliance has facilitated funding from the German aid agency, GIZ, to pay for the translation of the GeNS system into Arabic. This will also require that the GeNS application include functionality for right-to-left text orientation. Work on the Arabic GeNS version is expected to be completed by the end of 2022, or well before the Canadians actually onboard in either English or French. Although translation into Spanish has not yet been initiated, an overwhelming majority of Latin American countries have already onboarded the system or are in the testing phase. Nevertheless, the Secretariat aims to eventually translate the ePhyto Solution into all FAO official languages.
Commodity standards

As one of the developing agenda items of the new IPPC Strategic Framework 2020–2030, the development of commodity- and pathway-specific standards made great advancements in 2021.

The draft concept overarching ISPM was revised and approved by the Standards Committee (SC) working group (SC-7) to a second round of consultation comments. The draft ISPM received 265 comments from contracting parties and RPPOs. Additionally, the IPPC Secretariat received some comments, outside the OCS, from the private sector. The SC in its November 2021 meeting revised and recommended the draft ISPM for adoption at CPM-16.

Additionally, in September 2021, the IPPC Secretariat issued a call for experts for the Technical Panel on Commodity Standards (TPCS), following the criteria laid out in the Specification TP 6.¹ It is expected that the panel will start its operations, under the SC’s oversight, soon after the CPM adopts the overarching commodity standard and approves the inclusion of commodity topics into the SC work programme.

Moreover, the IPPC Secretariat and the topic stewards provided contracting parties and RPPOs with a presentation on the topic during the 2021 IPPC Regional Workshops. Communications and advocacy activities are planned for 2022, with a two-session webinar expected to take place in February 2022.

Sea containers

In 2021, the Sea Containers Task Force (SCTF),¹ continued to work through its mandate and explored various challenges, opportunities and considerations. Task force members discussed numerous, in-depth important issues. These are included in the SCTF final report for the CPM-16 (2022) to consider when deciding on the next steps for the IPPC and the development of any guidance. The SCTF is also proposing for the CPM to establish a focus group to drive the delivery of the agreed approach, the revision of CPM Recommendation R-06 and/or resuming the development of a draft ISPM on sea container cleanliness.

e-Commerce

Work on the IPPC e-Commerce Guide for plants, plant products and other regulated articles (2017-039) is well underway, and the guide is expected to be published in 2022. An e-commerce webpage² was launched on the International Phytosanitary Portal to provide easy access to those ISPMs, CPM recommendations, and IPPC guides and contributed resources of most relevance to e-commerce. The IPPC Secretariat continues to participate actively in the World Customs Organization (WCO) e-commerce working group as an observer, and was invited to contribute to the review of the WCO e-commerce Framework of Standards in 2021–2022. Opportunities for collaboration with the Universal Postal Union and the International Seed Federation on the topic of e-commerce are also being explored.

¹ Specification TP 6: https://www.ippc.int/en/publications/89276/
³ E-Commerce: https://www.ippc.int/en/core-activities/capacity-development/e-commerce/
Emerging pests

Fusarium oxysporum f. sp. cubense Tropical Race 4 (TR4)

Fusarium oxysporum f. sp. cubense Tropical Race 4 (TR4) had been restricted to Asia for many years (since 1973). In the past ten years, however, TR4 has jumped intercontinentally to Africa (2013) and South America (2019), creating a high risk of incursion in countries where Fusarium TR4 is still absent and where banana crops have paramount social and economic importance. The challenge is to prevent TR4 from spreading to neighbouring countries, and alerts must be consistently implemented. Training events will be held in March and April 2022 while the guidelines are prepared.

The IPPC is at the forefront in fighting Fusarium TR4, and a newly formed IC Team on Fusarium TR4 brings together qualified experts from around the world. In 2021, the team began to prepare awareness raising activities on surveillance, diagnostics and guidelines to implement phytosanitary measures, including pre detection and post-detection surveillance (to delimit eventual TR4 outbreaks). Simulation exercises on surveillance and pest outbreaks are being considered to strengthen national capacities as an essential activity for preparedness arrangements.

Fall armyworm

Fall armyworm (FAW) has rapidly spread around the world, with more than 70 countries currently affected, with recent detections in Jordan, New Caledonia, Papua New Guinea, Solomon Islands, Spain (Canary Islands) and Syria. Preventing the spread of FAW to new areas is a top priority for the FAO/IPPC Technical Working Group on Quarantine and Phytosanitary measures. In 2021, the IPPC Secretariat released the “Prevention, preparedness and response guidelines for Spodoptera frugiperda” in English, French, Arabic and Russian, which includes information on the distribution and biology of the pest, activities for the prevention and preparedness plan when the pest is still absent, and activities for the response plan, including phytosanitary measures, when the pest is officially detected and confirmed.

Alongside the newly published guidelines, the IPPC webinar series “Fall Armyworm, a global threat to prevent” was organized by the IPPC Secretariat to deliver key information for the prevention, preparedness and first response activities against FAW. Each training was held in English with Arabic, French and Russian interpretation, with an attendance of nearly 120 people per session. Question and answer papers, records, and presentations were posted on the webinar webpage in the IPP. The activities mentioned above provide knowledge and experience to the whole IPPC community to prevent emerging pests and build the capacities to deal with possible future outbreaks.
Communication and advocacy

Communication

The IPPC headline news and announcements released in 2021 reached a record high of 96 and 103 items, respectively. Social media content generated by the IPPC Secretariat also reached a wider audience with a steady increase in percentages in 2021 compared to 2020.

Information management

The IPPC Website is maintained and updated in six FAO languages, main new developments include users subscription to news/announcement/calls, the release of new phytosanitary components, a dedicated FAW web page and related online questionnaire for countries, online signatures for IYPH Youth Declaration, CPM-15 App, release of the “Beyond compliance” tool, release of new Stories components. The IPPC also participated in a study undertaken by Price Waterhouse Cooper (PWC), which resulted in recommendations for improvement of the IPP to be considered by the IPPC Secretariat and CPM FG on communications.

The IYPH website was maintained and updated in six languages.

The website for the Asia and Pacific Plant Protection Commission (APPPC) migration and release to a new cloud server (Amazon Web Service (AWS)), the APPPC website architecture was revised and the system was upgraded to use the latest version of the software.

Other IPPC tools, such as the Online Commenting System (OCS) and Phytosanitary Capacity Evaluation (PCE), are being maintained and updated as needed.
National reporting obligations

The IPPC Secretariat successfully completed the 2021 National Reporting Obligation (NRO) work plan under the support and guidance of the IC Team on NROs. The IPPC Secretariat organized six meetings of the IC Team on NROs to facilitate the implementation of the 2021 NROs work plan. The IPPC Secretariat initiated plans to establish the IC Sub-group on NROs. A NROs presentation was delivered virtually during the IPPC Regional workshops for seven regions.

Technical Consultation among Regional Plant Protection Organizations

Due to the pandemic, the face-to-face meeting of the Technical Consultation among Regional Plant Protection Organizations (TC-RPPO) was cancelled; however, the IPPC Secretariat convened two virtual meetings to help share information on how to cope with the effects of COVID-19 on the plant health world.
The IPPC Secretariat continues collaborating with a diverse group of international institutions to improve IPPC work by including diversity in the profiles that engage the IPPC community on technical topics, to raise awareness and disseminate knowledge globally on the importance and the work of IPPC, and to organize additional activities and events supporting IPPC core activities and the implementation of the IPPC Strategic Framework 2020–2030. This collaboration allows the IPPC community to connect with other realities and institutions from different constituencies, and raises the profile of the IPPC in the process. In 2021, the IPPC Secretariat collaborated with the Biological Weapons Convention (BWC) of the United Nations Office for Disarmament Affairs (UNODA), namely in the Biorisk Working Group aiming to bring together policy, normative and technical expertise in harmonizing and further developing a clear understanding of capacities, responsibilities, mechanisms and roles within the United Nations system. This collaboration contributes to strengthening the international community’s response to biorisk and to improving the prevention of and preparedness for the deliberate use of biological pathogens.

Collaborating with the Convention on Biological Diversity (CBD) is another key activity that continues to grow. In 2021, the IPPC and the CBD secretariats signed a Memorandum of Understanding, and a new shared work plan for 2022–2024 is being developed to further enhance synergies, cooperation and actions. During 2021, the IPPC Secretariat actively participated and called upon IPPC contracting parties in the meetings of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA-24) and the Subsidiary Body on Implementation (SBI-3), paving the way to the Fifteenth Session of the CBD Conference of Parties (COP-15).

Other collaborations saw the involvement of the Universal Postal Union, the International Atomic Energy Agency, the Inter-American Institute for Cooperation on Agriculture, the World Customs Organization, the Intergovernmental Panel on Climate Change and the International Maritime Organization.

The IPPC Secretariat managed to collaborate with several academic institutions such as the Imperial College London and the University of York in the United Kingdom of Great Britain and Northern Ireland, the University of Turin and the University of Florence in Italy, and the Autonomous University of Encarnación in Paraguay, as well as with stakeholders from civil society and private sector such as the International Seed Federation, CABI, Agroinovo, International Forest Quarantine Research Group and the International Center for Advanced Mediterranean Agronomic Studies.
Governance and strategy

The CPM Bureau: The Bureau of the CPM held 12 virtual meetings in 2021 to provide guidance and advance the IPPC work plan. The CPM Bureau provided guidance and reorganized the IPPC’s work during the second year of the COVID-19 crisis and commissioned the organization, by virtual means, of the IPPC governing and subsidiary body meetings in 2021. The Fifteenth Session of the Commission on Phytosanitary Measures (CPM-15) was historic, as it was the first ever to be held virtually, and resulted in the adoption of the IPPC Strategic Framework 2020–2030 and the establishment of three CPM Focus Groups on climate change, on communication and on implementing the IPPC Strategic Framework 2020–2030 development agenda items. The Bureau also reconsidered the established scope of the CPM Bureau’s decision-making authority in the time remaining before the next CPM meeting. It also supported the organization of the Strategic Planning Group (SPG) in October 2021 and began preparations for the Sixteenth Session of the Commission on Phytosanitary measures (CPM-16) in 2022. It also considered options for continuous promotion of the International Year of Plant Health legacies, and supported Zambia in the process of proclaiming the International Day of Plant Health (IDPH) through the FAO Conference and United Nations General Assembly.

The Strategic Planning Group (SPG): The IPPC SPG held virtual meetings on 19 and 21 October 2021 to advance strategic discussions on new global priorities and challenges in plant health. The SPG received updates on the work done by the newly established CPM focus groups on climate change, communication, and implementing the IPPC Strategic Framework 2020–2030 development agenda items, as well as on ePhyto and strengthening pest outbreak alert and response systems. It also discussed involvement of the IPPC community in One Health, a partnerships strategy, and follow-up actions to the International Year of Plant Health legacies, particularly the establishment of the International Steering Committee of the International Day of Plant (IDPH ISC) and the organization of the first International Plant Health Conference (IPHC).

Standards Committee: The SC held five focused meetings as well as their annual May and November meetings, which were all held virtually.

Implementation and Capacity Development Committee: The IC held eight meetings virtually throughout 2021.
About the IPPC

The Convention

The IPPC is an international plant health treaty that aims to protect cultivated and wild plants by preventing the introduction and spread of pests. The IPPC currently has 184 contracting parties.

To read the full IPPC text see: https://www.ippc.int/en/core-activities/governance/convention-text/

The IPPC’s strategic objectives for 2020–2030

- **enhance** global food security and increase sustainable agricultural productivity;
- **protect** the environment from the impacts of plant pests; and
- **facilitate** safe trade, development and economic growth.

VISION

The spread of plant pests is minimized and their impacts within countries are effectively managed.

MISSION

Protect global plant resources and facilitate safe trade.

The IPPC has several mechanisms for fostering cooperation among contracting parties.

These include:
- Developing ISPMs
- Fostering information exchange
- Developing capacity
- Providing legal and policy guidelines.

The World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (WTO-SPS Agreement) recognizes the IPPC as the international standard setting body for plant health. It is on par with Codex Alimentarius, responsible for food safety, and the World Organisation for Animal Health (OIE), responsible for animal health standards.
A brief history of the IPPC

The concept of international plant protection began in 1881 when five countries signed an agreement to control the spread of the grape Phylloxera, a North American aphid. The pest was accidentally introduced into Europe around 1865 and subsequently devastated much of Europe’s grape-growing regions.

The next major step in plant protection was the International Convention for the Protection of Plants, signed in Rome in 1929. FAO adopted the IPPC in 1951.

The IPPC came into force in April 1952, superseding all previous international plant protection agreements. The IPPC was reviewed in 1979 and 1997. It was recognized by the 1989 Uruguay Round of the General Agreement on Tariffs and Trade (GATT) as a standard setting organization for the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement).
Governing bodies

The IPPC is governed through the CPM, which meets annually to review the IPPC work programme and take strategic decisions, including adopting new ISPMs. The CPM Bureau is the CPM’s seven-member elected executive branch. The CPM Bureau provides guidance to the IPPC Secretariat on activities, particularly those related to financial and operational management, between sessions of the CPM. The SPG provides a strategic perspective on the work of the IPPC and supports improvements by offering recommendations and advice to the CPM on any issues that have been referred to and any other issues related to the functions of the SPG. The Financial Committee provides advice on financial matters and resource mobilization issues to the CPM through the CPM Bureau.

The SC is composed of 25 members from seven regions and is mainly responsible for overseeing the IPPC standard setting process and developing the ISPMs.

The IC is composed of 12 members, plus one RPPO representative and one SC representative. It provides technical oversight to activities that enhance the capacity of contracting parties to implement the IPPC and meet its strategic objectives.
The IPPC Secretariat

The IPPC Secretariat coordinates the core activities of, and provides operational support to, the IPPC work programme. It is hosted at FAO headquarters in Rome, Italy.

The Standard Setting Unit (SSU) coordinates and facilitates the processes behind setting ISPMs and CPM recommendations.

It also provides technical support for the implementation of the IPPC’s strategic framework. It supports the SC and several expert subgroups such as the drafting groups for developing standards, including those responsible for translating and publishing ISPMs and CPM recommendations.

The Implementation and Facilitation Unit (IFU) coordinates and facilitates the implementation of the IPPC, the ISPMs and CPM recommendations. It supports the IC and its subgroups and teams to facilitate implementation and capacity development activities by supporting contracting parties to implement the IPPC, ISPMs and CPM recommendations.

The Integration and Support Team (IST) supports the governance, technical, strategic planning, partnership, and communication and advocacy activities of the IPPC Secretariat. For example, it organizes the CPM, the CPM Bureau and SPG meetings. It coordinated the IPPC Secretariat’s advocacy for the delivery of the International Year of Plant Health 2020 and efforts towards the proclamation of the International Day of Plant Health. The IST is responsible for the IPPC website, the NRO platform, the Online Comment System, and a host of other online tools. It also supports the IPPC activities related to emerging pests and other plant health issues.

The ePhyto Group is responsible for the global implementation of the IPPC ePhyto Solution, coordination of the ePhyto Steering Group’s work, and for ensuring, along with the United Nations International Computing Centre, the sustained and smooth operations of the ePhyto Solution. It liaises with a number of partners, including the Global Alliance for Trade Facilitation as well as the World Bank, and provides support to onboarding countries.
The IPPC community

The IPPC boasts a network of international partners from all over the world. These include 10 RPPOs working to secure plant health and environmental protection in their regions. The IPPC specifies the functions of RPPOs as:

- **coordinating** NPPOs and participating in activities to promote and achieve the objectives of the IPPC;
- **cooperating** with other regions to promote harmonized phytosanitary measures;
- **gathering** and disseminating information, in particular in relation to the IPPC; and
- **cooperating** with the CPM and the IPPC Secretariat in developing and implementing International Standards for Phytosanitary Measures.

Each RPPO has its own action plan and programme. However, each year the IPPC Secretariat organizes a TC-RPPO where all RPPOs gather to discuss common challenges, share information and look for synergies.

The current RPPOs of the IPPC are: the Asia and Pacific Plant Protection Commission (APPPC); Caribbean Agriculture Health and Food Safety Agency (CAHFSA); Comunidad Andina (CAN); Comite de Sanidad Vegetal del Cono Sur (COSAVE); European and Mediterranean Plant Protection Organization (EPPO); Inter-African Phytosanitary Council (IAPSC); Near East Plant Protection Organization (NEPPO); North American Plant Protection Organization (NAPPO); Organismo Internacional Regional de Sanidad Agropecuaria (OIRSA); and Pacific Plant Protection Organisation (PPPO).

At the national level, IPPC-related activities are primarily coordinated and implemented by NPPOs.

Map of the 184 contracting parties to the IPPC.
Source: IPPC Secretariat.

Note: the large red star represents the IPPC Secretariat in FAO headquarters, the small red stars represent the RPPO headquarters.
IPPC partners

The IPPC Secretariat cooperates with 42 external partners and organizations to create synergies and to achieve common goals.

11 United Nations organizations
- Biological and Toxic Weapons Convention (BWC)
- Codex Alimentarius Commission
- Convention on Biological Diversity (CBD)
- International Atomic Energy Agency (IAEA)
- International Maritime Organization (IMO)
- International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)
- Ozone Secretariat of the United Nations Environment Programme (UNEP)
- TSIA Technical Network
- United Nations Environment Programme (UNEP)
- United Nations Framework Convention on Climate Change (UNFCC)
- Universal Postal Union (UPU)

14 Academic and research organizations
- Centre for Agriculture and Biosciences International (CABI)
- Centre international de hautes études agronomiques méditerranéennes (CIHEAM)
- Entomological Society of America (ESA)
- Erasmus Mundus Programme of Masters in Plant Health
- European Phytosanitary Research Coordination (Euphresco)
- Global Taxonomy Initiative of the CBD (GTI/CBD)
- Imperial College
- International Pest Risk Research Group (IPRRG)
- International Association for the Plant Protection Sciences (IAPPS)
- International Forestry Quarantine Research Group (IFQRG)
- International Society for Plant Pathology (ISPP)
- La Sapienza University of Rome
- Phytosanitary Measures Research Group (PMRG)
- University of Florence

11 International organizations
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- Eurasian Economic Commission (EEC)
- Global Alliance for Trade Facilitation
- Inter-American Institute for Cooperation on Agriculture (IICA)
- International Organization for Standardization (ISO)
- International Seed Testing Association (ISTA)
- Standards and Trade Development Facility (STDF)
- World Organisation for Animal Health (OIE)
- World Bank (WB)
- World Customs Organization (WCO)
- World Trade Organization (WTO)

6 Industry and non-governmental organization (NGO) partners
- Container Owners Association (COA)
- Europe-Africa-Caribbean-Pacific Liaison Committee (COLEACP)
- Global Express Association (GSA)
- International Grain Trade Coalition (IGTC)
- International Olive Council (IOC)
- International Seed Federation (ISF)
Contribution to the United Nations Agenda for Sustainable Development

Adopted standards – Standard setting unit

International standards for phytosanitary measures are international standards adopted by the FAO Conference, the Interim Commission on Phytosanitary Measures or the CPM established under the IPPC. They aim to harmonize the phytosanitary measures applied in international trade.
The way forward

Dear Reader,

I hope you enjoyed learning about our key achievements in 2021, which was a year of unprecedented challenge for the International Plant Protection Convention (IPPC) community. 2022 will still be another challenging year for the entire IPPC community, with the implementation of the IPPC Strategic Framework 2020–2030 and celebration of the 70th anniversary of the IPPC Convention, as well as the International Day of Plant Health (IDPH).

The IPPC will continue to address new challenges and use innovative approaches for plant health to support sustainable development. We will empower the IPPC community and the Secretariat, which will trigger a reflection on further developing the capacity of NPPOs, while enhancing those of the IPPC Secretariat. The IPPC Secretariat will organize a number of activities and events, mainly virtually, to promote phytosanitary capacity development for the IPPC community and professional development for the IPPC Secretariat. The IDPH event will be organized jointly with FAO to promote plant health globally, as well as to provide guidance to NPPOs for celebration and promotion of IDPH at country level. The first International Plant Health Conference will be jointly organized with the United Kingdom of Great Britain and Northern Ireland in London in the second half of 2022. The Sixteenth Session of the Commission on Phytosanitary Measures (CPM-16) will be a decisive time to have a virtual discussion about the future shape of our Convention and the direction to be taken by the global phytosanitary community, including the issues related to the implementation of the IPPC Strategic Framework 2020–2030. The core professional activities for the IPPC community in 2022 include implementation of the IPPC annual work plan for governance, standard setting, implementation and capacity development, communication and external cooperation, and ePhyto.

In addition, the IPPC Secretariat will continue to work on the phased implementation of the following eight development agenda items of the Strategic Framework: commodity- and pathway-specific ISPMs; developing guidance on the use of third-party entities; diagnostic laboratory networking; harmonizing electronic data exchange; managing e-commerce and postal and courier pathways; strengthening pest outbreak alert and response systems; assessing and managing climate change impacts on plant health; and coordinating global phytosanitary research.

In 2022, the IPPC Secretariat, as a part of the Plant Production and Protection Division (NSP) of FAO, will continue to collaborate to promote the joint work of the FAO Plant Health Team, including promoting cooperation between the IPPC Secretariat and FAO regional and subregional offices. We will continuously strengthen our external cooperation with key partners, such as the CBD Secretariat, WCO, IAEA, STDF and the European Union, among others. We look forward to mobilizing adequate extrabudgetary resources to effectively implement the IPPC Strategic Framework 2020–2030 and ensuring the sustainability of the IPPC Secretariat staff. I thank you all for being part of these efforts and look forward to cooperating closely together to protect global plant resources from pests and to facilitate safe trade.

Avetik Nersisyan
IPPC Secretariat Officer in charge of daily matters

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Further reading

2021 Reports and publications

- Commission on Phytosanitary Measures (CPM) Bureau reports
  https://www.ippc.int/en/core-activities/governance/bureau/
- Strategic Planning Group (SPG) report
  https://www.ippc.int/en/core-activities/governance/strategic-planning-group/
- Financial Committee (FC) reports
- Implementation and Capacity Development Committee (IC) and subgroup reports
  https://www.ippc.int/en/core-activities/capacity-development/capacity-development-committee/
- Standards Committee (SC) reports
  https://www.ippc.int/en/core-activities/standards-setting/standards-committee/
- Technical Panel on Phytosanitary Treatments (TPPT) reports
  https://www.ippc.int/en/core-activities/standards-setting/expert-drafting-groups/technical-panels/technical-panel-phytosanitary-treatments/
- Technical Panel on Diagnostic Protocols (TPDP) report
  https://www.ippc.int/en/core-activities/standards-setting/expert-drafting-groups/technical-panels/technical-panel-diagnostic-protocols/
- IYPH International Steering Committee (ISC) and Technical Advisory Board reports
  https://www.ippc.int/en/ph/iyphic/
- IPPC Workshop reports
  https://www.ippc.int/en/core-activities/capacity-development/regional-ippc-workshops/
- IPPC ePhyto Solution reports
  https://www.ippc.int/en/ephyto/
- FAO/IPPIC Fall Armyworm (FAW) TWG reports

2021 Publications

- 2020 IPPC Annual Report
- IPPC Strategic Framework 2020–2030 (available in all United Nations official languages):
- Summary for Policy Makers of the scientific review of the impact of climate change on plant pests (available in all United Nations official languages)
  https://doi.org/10.4060/cb7139en
- Youth declaration for plant health (available in all United Nations official languages)
- Pest status guide
  https://doi.org/10.4060/cb6103en
- Surveillance guide
  https://doi.org/10.4060/cb5880en
- Prevention, Preparedness and Response Guidelines for Spodoptera frugiperda (available in Arabic, French, English and Russian)
  https://doi.org/10.4060/cb5980en
- Authorizing entities to perform phytosanitary actions
  https://doi.org/10.4060/cb3834en
- Plant health and climate change
- Digital reports:
  - International Year of Plant Health Report (available in all United Nations official languages)
  - Scientific review of the impact of climate change on plant pests: a global challenge to prevent and mitigate plant-pest risks in agriculture, forestry and ecosystems (available in all United Nations official languages)
Key resources

- The International Plant Protection Convention (IPPC) text
  https://www.ippc.int/en/core-activities/governance/convention-text/

- Commission on Phytosanitary Measures (CPM)
  https://www.ippc.int/en/core-activities/governance/cpm/

- Adopted standards (ISPMs)
  https://www.ippc.int/en/core-activities/standards-setting/ispm/

- CPM recommendations

- Standard setting procedure manual

- Capacity development and technical manuals

- International Year of Plant Health (IYPH) 2020 website

Website and social media

- IPPC website
  https://www.ippc.int/en/

- Facebook
  https://www.facebook.com/ippcheadlines/

- LinkedIn
  https://www.linkedin.com/groups/3175642/

- Twitter
  https://twitter.com/ippcnews

- Flickr
  https://www.flickr.com/people/182442121@N04/

- Videos on YouTube
  IPPC Playlist: https://www.youtube.com/playlist?list=PLzp5NgJ2-dK4T7GE2fsGujtlixS1rCTC
  IYPH Playlist: https://www.youtube.com/watch?v=cmPAwiiK2BU&list=PLzp5NgJ2-dK4cmV7gTSNPk6y6V9AAr52q