

PAN International Consolidated List of Banned Pesticides

6th Edition, May 2022

Explanatory note

The Consolidated List of Banned Pesticides is presented in a separate spreadsheet; this document provides a summary of information and instructions on using the spreadsheet which can be found on-line at http://pan-international.org/

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Summary of information

At time of publication of the 6th Edition of the Consolidated List of Banned Pesticides (hereafter the Consolidated List), information on banned pesticides was available for 168 countries.

One or more of these countries have banned a total of 531 pesticide active ingredients or groups of actives regarded as still 'currently in use' in the global market, i.e. not considered to be obsolete. This includes 73 newly added active ingredients.

The countries with the most known bans are those of the EU and the UK (195 banned + 269 specifically 'not approved' pesticides which are Highly Hazardous Pesticides (HHPs) ¹ and/or banned by another country, ² Turkey (212), Saudi Arabia (201) Switzerland (141), Egypt (140), Brazil (133), USA (21 banned plus 81 'voluntarily withdrawn'), Morocco (70), Indonesia (62), Cambodia (60), India (56), Mauritania (52), Palestine (52), and China (54).

Please note that this present version of the 6^{th} Edition had been modified to include the latest updates regarding pesticides listed as "banned" in the EU.

¹ According to PAN Criteria for HHPs; see http://pan-international.org/wp-content/uploads/PAN HHP List.pdf

² See section on the EU and UK for an explanation of banned and not approved.

Background

Pesticide Action Network (PAN) is frequently asked for information on pesticides that have been banned by countries. The Consolidated List has been developed to identify which pesticides have been banned by particular countries, because there appears to be no other comprehensive compilation of such information.³

The Consolidated List also shows whether these pesticides are regarded as highly hazardous (HHP) according to the criteria established by the FAO/WHO Joint Meeting on Pesticide Management (JMPM)⁴ and/or according to the PAN International List of HHPs, which contains additional criteria agreed by PAN.⁵ It does not include those banned pesticides regarded as being obsolete. It also does not include severe restrictions; entries are for complete bans of pesticide active ingredients only. This is because experience has shown that, in some countries, severely restricted pesticides can still find their way into prohibited uses relatively easily. It also does also not include pesticides that are not approved (but not banned) by the European Union unless they are an HHP and/or banned by any other country (see below under section on European Union and UK for further explanation).

The Consolidated List is an ongoing exercise in drawing together information on pesticides that have been banned in various countries. This could be regarded as another means of identifying pesticides that may be regarded as HHPs, at least in some countries, as bans are often made in response to problems experienced in that country, or other countries. The Consolidated List is far from complete as many countries do not publish lists of their nationally banned pesticides, nor notify them to the secretariat of the Rotterdam Convention. As new information on bans is obtained, the Consolidated List is updated. An updated version of the list will be published by PAN approximately every year, depending on availability of new information.

³ The Rotterdam Convention databases contain pesticides banned or severely restricted in countries that notify such to the secretariat; and also, countries that refuse consent to import listed pesticides. However, not all countries have ratified the Convention and so do not provide this information; and some countries that have ratified it also do not provide the information. It should be noted that the Convention does NOT seek to ban pesticides (or industrial chemicals which are also covered by the Convention) or ask countries to ban listed pesticides; it merely assists the exchange of information on final regulatory actions taken by its parties.

⁴ For the JMPM criteria see: http://www.fao.org/agriculture/crops/thematic-sitemap/theme/pests/code/hhp/en/. The determination of whether a pesticide meets the JMPM criteria is based on the information available in the PAN List of HHPs. This allows for some variation in GHS ratings between countries as the PAN List of HHPs uses both EU and Japan GHS. It does not allow for variations in the formulations of WHO Class Ia and Ib; the actives are included without consideration of formulation.

⁵ PAN believes that the JMPM criteria do not adequately cover certain health and environmental hazards. For this reason, PAN has taken the basic JMPM criteria and added to them criteria for inhalation toxicity (H330) as this is not covered by WHO classification; endocrine disruption; toxicity to bees and aquatic organisms; persistence in water, soil or sediment; and bioaccumulation. It also includes pesticides agreed by the Conference of Parties (CoP) to the Rotterdam Convention to meet the criteria of the Convention but which the CoP has yet to list under the Convention. http://pan-international.org/wp-content/uploads/PAN HHP_List.pdf

New information since the 6th edition

USA

A new column has been added to the spreadsheet to identify pesticides that have been voluntarily withdrawn by the pesticide industry in the USA, as separate from those for which a ban has been enforced by the government. In some countries, such as the USA, governments encourage the industry to voluntarily withdraw pesticides for various reasons. The USA voluntary withdrawals are included here as this is regarded as particularly useful information for other countries, as the lack of a ban can mistakenly lead to the belief that the pesticide is still approved in the USA.

Obsolete pesticides and other chemicals

The List has never included pesticides regarded as obsolete. However, a new annex has been added to this edition to be better identify these pesticides. Annex 2 contains pesticides that have been banned but which are deemed to be obsolete by *The WHO Recommended Classification of Pesticides by Hazard and Guidelines to Classification 2019*, or by the International Union of Pure and Applied Chemistry (IUPAC) Pesticide Properties Database (PPDB),⁶ unless there is evidence that the pesticide is still in use. This annex does not include all obsolete pesticides, only those for which regulatory action has been found for one or more countries.

If there is any information that one of these pesticides is still in use in a country, please inform PAN at info@panap.net. One example of this situation is that of pindone: although listed as obsolete by WHO, it, is known to be still in use in New Zealand at least.

A second part to Annex 2 contains chemicals that have been banned as pesticides by one or more countries, but which cannot be found in pesticide databases – in particular, the WHO Classification, the IUPAC Pesticide Properties Database or the BPCP Compendium⁷) and are therefore taken to be chemicals other than pesticide active ingredients.

New entries

Six new countries and 73 new pesticides have been added since the 5th edition of the Consolidated List, issued in March 2021, plus a number of other bans by countries.

⁶https://sitem.herts.ac.uk/aeru/ppdb/en/index.htm

⁷ https://pesticidecompendium.bcpc.org/

The new countries are:

Angola, Barbados, Bhutan, Iceland, Solomon Islands, Singapore

The new pesticides added are:

2-aminobutane Dodmorphe Methyl isothiocyanate
4-chlorophenoxyacetic acid Empenthrin Metominostrobin
Acrinathrin Endothal Metosulam

Acrinathrin Endothal Metosulam Acryonitrile Fenbuconazole Nuarimol Anilazine Fenothiocarb Oxine-copper Barban Fenoxycarb Oxycarboxin Benalaxyl Phosmet Fenpiclonil Benodanil Pindone Fenpropimorphe

Bioallethrin / esbiothrin Flamprop-M Primisulfuron

Bromofenoxim Flubendiamide Primisulfuron methyl

Bromoxynil butyrate Flumetsulam Profoxydim
Bronopol Fluridone Propyzamide
Copper oxide Fluthiacet-methyl Pyrithiobac sodium

CycloateFomesafenQuizalofopCyclosulfamuronFuberidazoleScillirosideCypermethrin, alphaHaloxyfopSethoxydim

Cypermethrin, theta Haloxyfop ethoxyethyl ester Strepomyces lydicus Wyel

Cypermethrin, zetaHydrogen peroxideTebuthiuronCyproconazoleImazalilThiazopyrDichlofluanidImazapicThidiazuronDichloneImazamethabenz methylTralkoxydimDifenzoquatImazethapyrTriazamate

Dimethipin Isofenphos Trifloxysulfuron sodium

Diquat Kinoprene

Disodium methanearsonate

(DSMA) Methoprene

Most of these newly listed pesticides are the result of bans in Turkey (192), Saudi Arabia (127), EU and UK (4 banned + 59 not approved), Egypt (63) and Morocco (30) – with some being banned by more than one country. Note: not all these bans are new bans, some are merely newly accessed information.

Pesticides removed

Pyracarbolid – obsolete according to *The WHO Recommended Classification of Pesticides by Hazard and Guidelines to Classification 2019*.

How to use the Consolidated List

The list is in a spreadsheet rather than a PDF document partly because of the size and partly for ease of reading:

- 1. To access the information, go to the bottom of your screen and drag the grey bar right and the countries will unfold. Do the same with the grey bar on the right of the document drag it down and the pesticides will unfold.
- 2. The total number of countries that have banned each particular pesticide can be found in column C in red, and the total number of pesticides banned by each country can be found in red in row 2.
- 3. Where a pesticide is banned in a country it is identified by 1 in the country column.
- 4. The column headed 'PAN HHP' identifies whether the pesticide banned is on the PAN HHP list, denoted by X. It does not include all pesticides on the PAN HHP list, only those that one or more countries have banned, or in the case of the EU not approved (see below for explanation).
- 5. The column headed 'JMPM HHP' identifies whether the pesticide banned meets the JMPM Criteria 1-7 for an HHP, denoted by X. It does not include all pesticides that meet the JMPM criteria, only those that one or more countries have banned. It also does not include those that meet Criterion 8 as these are yet to be identified.
- 6. The pesticides in blue are ones that have not been banned in any country but are HHPs according to PAN criteria and are not approved in the EU; see below for further explanation of 'not approved in the EU'.
- 7. The red tag alongside a country name and/or an entry in a country column identifies the source of the information. Run the mouse over the tag and the source is revealed. Sources are summarized in an Annex to this note.
- 8. PIC means Prior Informed Consent and denotes a notification of a ban or 'No Consent to Import' to the Rotterdam Convention secretariat.
- 9. The entries in orange (sometimes single entries, sometimes entire country lists) are those entered in the Rotterdam Convention's Import Responses Database as No Consent to Import see below under Sources of Information for further explanation

European Union (EU) & UK

The Consolidated List contains two columns for the EU and UK. The first column is for pesticides that are banned and either notified to the Rotterdam Secretariat or identified as banned pesticides in the European Chemicals Agency (ECHA) database. However, this does not give the full picture. In the EU pesticides must be on the positive, or approved, list before they can be authorised in any of the EU Member States. The EU pesticide database lists more than 800 pesticides that are specifically 'not approved', i.e. approval was refused or the approval expired when no application for re-approval was made. These pesticides are not allowed to be used in the EU but are not in fact banned. These pesticides can be approved again, theoretically, sometime in the future. Because there are too many 'not approved' pesticides to add to this Consolidated List, only those that are HHPs according to the PAN Criteria and/or banned by another (i.e. non-EU) country and are not officially banned by the EU have been included. So, in the second column for the EU:

- 27 means it is not approved in the 27 EU Member States
- a blank space means it is approved
- ? means the information is not available.

The EU approved/not approved status can change, and therefore should be checked by anyone wanting to know the current situation. This information can be found in the EU pesticides database at: https://ec.europa.eu/food/plant/pesticides/eupesticides-database/active-substances/?event=search.as.

It can also happen that active ingredients on the EU positive list may not be approved in all or even any of the EU member states if no company applies for authorisation or if a country declines the authorisation of products with the active ingredient for specific health or environmental reasons. This situation is not reflected in the Consolidated List, except where certain EU member countries have specifically banned pesticide products the active ingredient of which is approved at the EU level. These are identified under that country as being in addition to the EU bans.

Despite the UK's departure from the European Union, during the transition period pesticide registration is to remain the same as the EU's, so the separate columns for the UK reflect the European Union Bans and 'Not Approved'.

Groups of Compounds

Some countries have banned whole groups of compounds, e.g. mercury compounds and arsenic compounds; others have banned one or more of them but not the class of compounds as a whole. Where countries have banned the group as a whole but still listed bans for some particular pesticides, these bans are also entered (see for example EU for 4 mercury compounds).

Additionally, the EU Pesticide Database, as well as Annex I of 1107/2009/EC, usually lists the main chemical compound but not all salts, esters and isomers. Therefore, the non-approval of a main chemical compound in the EU usually (but not always) means non-approval of all its salts, esters and isomers. This situation is not yet reflected in the CLBP: generally, only the main chemical is included for the EU and UK. Some countries ban only particular salts, esters or isomers and these are included in the list where they are known.

General note on sources of information

For each country, the primary source of information used, where available, is an official list or regulatory action published by a government agency. A secondary source is the Database of Final Regulatory Action maintained by the secretariat for the Rotterdam Convention. A third source is answers to the Questionnaires issued by SAICM Regional Coordinating Groups. If none of these sources are available, some other sources have been used including direct communication with authorities, FAO reports etc.

Another source of information is the Rotterdam Convention's Import Responses Database. Pesticides listed in this database as having "No consent to import" have been added to the Consolidated List of Bans, because Article 10.9 of the Rotterdam Convention states that if a country takes a decision not to consent to the import of a chemical it shall also prohibit import of the chemical from any other source and domestic production for use (although it can still be produced for export). Although this may not be a ban established by regulatory action, in practice it should act as a ban. New to this 5th Edition are the 'interim' decisions of 'No consent to import'. Final decisions of "No consent to import" were added to the 4th edition. However, on advice from the Rotterdam Convention secretariat that there is no time limitation on interim decisions and exporting parties have to comply with them in the same way as for final decisions, it was decided that interim decisions should be included here. 'No consent to import' decisions are entered in orange to distinguish them from bans recorded from other sources. A number of countries have been added to the Consolidated List solely on the basis of their import responses.

There is occasionally a lack of consistency between the various sources of information. In such situations, the official government list is taken as the principal source and the Rotterdam Convention database as a secondary source.

Disclaimer and Request

The information provided is as complete and accurate as we are able to determine at the time of publication. However, we acknowledge that there may be errors simply because of the difficulty in obtaining accurate information and in the changing status of registered and/or banned products. If any errors are spotted please notify PAN at info@panap.net with the subject line Consolidated List of Bans. We would also

welcome any information on notifications of bans from countries including those not yet included in the CLBP or where the information is partial. We are grateful to those countries that already provide this information to us and those pesticide registrars that contact us directly.

The Consolidated List of Bans is available on request from info@panap.net, as well as at http://pan-international.org/

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Annex 1: Sources of Information by Country

Key:

PIC, Notifications Database = Rotterdam Convention Secretariat database on final notifications of country bans, at

http://www.pic.int/Procedures/FinalRegulatoryActions/Database/tabid/1368/language/en-US/Default.aspx

PIC, Import Responses Database = Rotterdam Convention Secretariat database on Country Import Responses for listed pesticides, at

http://www.pic.int/Procedures/ImportResponses/Database/tabid/1370/language/en-US/Default.aspx

- 1. Albania PIC, Import Responses Database.
- **2. Antigua & Barbuda** (i) The Pesticides and Toxic Chemicals Act 2008, Schedule 3 Prohibited Products http://extwprlegs1.fao.org/docs/pdf/ant84662.pdf (ii) PIC, Import Responses Database.
- **3. Argentina** Res. SENASA 670/18. Camara Argentina de Comercio y Servicios 05/10/2018 (B009/10/2018. (ii) PIC, Import Responses Database.
- **4. Armenia** PIC, Notifications and Import Responses Databases.
- **5. Australia** PIC, Notifications and Import Responses Databases; http://www.apvma.gov.au/.
- **6. Bahrain** PIC, Import Responses Database.
- **7. Bangladesh** FAO, 2014, Compilation of Questionnaire on Practical Aspects of Pesticide Risk Assessment and Phasing out of HHPs (FAO/APPPC Asia Regional Workshop on Practical Aspects of Pesticide Risk assessment and phasing out of HHPs, 19-22 May 2014, Nanjing, China.
- 8. Belize PIC, Import Responses Database.
- **9. Benin** (i) FAO, Compilation des Questionnaires Pesticides Tres Dangereux des Pays de l'Afrique de l'Ouest. (ii) PIC, Import Responses Database.
- **10. Bolivia**, **Plurinational State of –** PIC, Import Responses Database.
- 11. Bosnia & Herzegovina PIC, Import Responses Database.
- **12. Brazil** (i) Regularização de Produtos Agrotóxicos Monografias Excluídas.

https://www.gov.br/anvisa/pt-

br/setorregulado/regularizacao/agrotoxicos/monografias/monografias-excluidas-porletra.

(ii) Diário Official da Uniáo, No 139, segunda-feira, 22 de julho de 2019 https://www.gov.br/anvisa/pt-

<u>br/setorregulado/regularizacao/agrotoxicos/monografias/monografias-excluidas/c62-2013-carpropamida.pdf.</u> (iii) PIC, Notifications and Import Responses Databases.

- 13. Burkina Faso PIC, Notifications Database.
- **14. Burundi** PIC, Import Responses Database.
- **15. Cabo Verde** PIC, Notifications and Import Responses Databases.
- **16. Cambodia** (i) FAO, 2014, Compilation of Questionnaire on Practical Aspects of Pesticide Risk Assessment and Phasing out of HHPs (FAO/APPPC Asia Regional Workshop on Practical Aspects of Pesticide Risk assessment and phasing out of HHPs, 19-22 May 2014, Nanjing, China. (ii) PIC, Import Responses Database.
- **17. Cameroon** (i) Official government list: Liste des Pesticides Homologues au Cameroun au 31 Juillet 2013. Liste réservée au Grand Public.

http://www.minader.cm/uploads/File/Liste%20des%20Produits%20homologués%20et%20APV%2031%20JUILLET%202013%20Grd%20Public%20V1.pdf. (ii) PIC, Notifications and Import Responses Databases, and PIC Circular 26.

- **18. Canada** (i) Pests and Pesticide Management, Re-evaluation Decisions https://www.canada.ca/en/health-canada/services/consumer-product-safety/reports-publications/pesticides-pest-management/decisions-updates.html#rvd-drv; PIC, Notifications and Import Responses Databases. (ii) POPs Review Committee Risk Management Evaluation of Dicofol (iii) POPs Review Committee draft Methoxychlor Risk Profile.
- **19. Chad** PIC, Notifications and Import Responses Databases.
- **20. Chile** (i) Servicio AgríCola Y Ganadero, Sag. Lista de Plaguicidas de Uso AgríCola Prohibidos en Chile Fecha última actualización: 07 de junio de 2017.

http://www.sag.cl/sites/default/files/lista_de_plaguicidas_prohibidos.pdf. (ii) PIC, Import Responses Database. (iii) Ministerio De Agricultura Subsecretaría de Agricultura / Servicio Agrícola y Ganadero / Dirección Nacional Cancela las Autorizaciones Vigentes de los Plaguicidas Formulados en base a Metamidifos y Prohibe Palguicidas en base a Azinfos metilo, Carbofuran y Meta. (Resolución) Núm. 4.245 exenta. Santiago, 7 de Junio de 2019. Diario Oficial i de la Republica de Chile, Ministerio del Interior y Seguridad Pública. Normas Generales CVE 1604195.

- **21. China** (i) Government list of banned pesticides, supplied by PEAC, 2019. FAO, 2014, Compilation of Questionnaire on Practical Aspects of Pesticide Risk Assessment and Phasing out of HHPs (FAO/APPPC Asia Regional Workshop on Practical Aspects of Pesticide Risk assessment and phasing out of HHPs, 19-22 May 2014, Nanjing, China. (ii) PIC, Notifications and Import Responses Databases. (iii)
- http://www.moa.gov.cn/nybgb/2016/dishiqi/201711/t20171126 5919613.htm (iv) http://www.moa.gov.cn/gk/tzgg 1/gg/201903/t20190325 6177166.htm.
- **22. Colombia** (i) SAICM GRULAC Coordinator Group Survey on the Status of HHP in Latin America 2014. (ii) PIC, Import Responses Database.
- **23. Congo** PIC, Import Responses Database.
- **24. Congo, Democratic Republic of –** PIC, Import Responses Database.
- **25. Cook Islands** PIC, Import Responses Database PIC Circular 26.
- **26. Costa Rica** (i) SAICM GRULAC Coordinator Group Survey on the Status of HHP in Latin America 2014. Project factsheet (ii): Summary of carbofuran and other recent ban decisions in Costa Rica. Prepared by IRET and PAN UK for Rotterdam CRC-12, August 2016. Source: adapted/translated from official decree summary tables (in Spanish) and other information provided by IRET, Aug 2016. Joint decrees are issued by Ministries of Agriculture (MAG); Health (S); Environment & Energy (MINAE); and Work & Social Security (MTSS). (iii) PIC, Import Responses Database.
- **27. Cote d'Ivoire** (i) PIC, Notifications and Import Responses Databases. (ii) UNEP-POPS-POPRC.12-11-Add.1.
- **28. Cuba** PIC Notifications and Import Responses Databases.
- **29. Dominica** PIC, Import Responses Database.
- **30. Dominican Republic** PIC, Notifications and Import Responses Databases.
- **31. Ecuador** (i) SAICM GRULAC Coordinator Group Survey on the Status of HHP in Latin America 2014. (ii) PIC, Notifications and Import Responses Databases.
- **32. Egypt** Consolidated List of Hazardous Substances Banned in the Arab Republic of Egypt. http://www1.apc.gov.eg/ar/products/showall.aspx
- 33. El Salvador PIC, Import Responses Database.
- **34. Equatorial Guinea** PIC, Import Responses Database.
- **35. Eritrea** PIC, Import Responses Database.

- **36. Ethiopia** PIC, Import Responses Database.
- **37. EU banned** (i) ECHA, Chemicals subject to PIC https://echa.europa.eu/information-on-chemicals/pic/chemicals selected: Annex 1 + pesticides + banned (as published by ECHA on 20 April 2022). (ii) PIC, Notifications Database.
- **38. EU not approved** EU Pesticides Database

https://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/active-

<u>substances/?event=search.as</u>. Where a pesticide is banned by another country but is not included in the EU database, the Pesticide Properties Database

[https://sitem.herts.ac.uk/aeru/iupac/] was checked; if it is also not in here or states that it is not approved in the EU, it is taken as Not Approved.

- **39. France** in addition to the pesticides banned and Not Approved in the EU, France has announced the ban of metam sodium. https://www.anses.fr/en/content/products-containing-metam-sodium-anses-announces-withdrawal-marketing-authorisations-0.
- **40. Fiji** (i) National Plan for Implementation of the Stockholm Convention on Persistent Organic Pollutants in Fiji Islands 2006. (ii) https://www.fiji.gov.fi/Media-

<u>Centre/News/PARAQUAT-AND-IMIDACLOPRID-PESTICIDE-BANNED-FROM-1S</u> (iii)

 $WH0.2021.\ Live\ life: an implementation\ guide\ for\ suicide\ prevention\ in\ countries.$

https://www.who.int/publications/i/item/9789240026629

- **41. Gabon** PIC, Import Responses Database.
- **42. Gambia** PIC, Notifications and Import Responses Databases.
- **43. Georgia** PIC, Import Responses Database.
- **44. Ghana** PIC, Import Responses Database.
- **45. Grenada** Pesticides and Toxic Chemicals Control Act, 2015.

https://gov.gd/sites/moal/files/docs/Documents/Pesticides%20%26%20Toxic%20Chemicals%20Control%20Bill.%202015.pdf.

- **46. Guatemala** PIC, Import Responses Database.
- **47. Guinea** (i) FAO Compilation des Questionnaires Pesticides Tres Dangereux des Pays de l'Afrique de l'Ouest. (ii) PIC, Import Responses Database.
- **48. Guinea-Bissau** PIC, Notifications and Import Responses Databases.
- **49. Guvana** PIC, Notifications and Import Responses Databases.
- **50. Honduras** PIC, Import Responses Database.
- **51. India** (i) Government of India, List of Pesticides Which are Banned, Refused Registration and Restricted in Use as on 01.04.2022. http://ppqs.gov.in/divisions/cib-rc/registered-products. Accessed November 2020. (ii) The Gazette of India Part II Section 3 Sub-section (iii). No. 1356. New Delhi, Thursday August 9 2018. (iv) PIC, Import Responses Database.
- **52. Indonesia** Government of Indonesia. Permentan no.24/2011; no.39/2015; no43/2019.
- **53. Iran, Islamic Republic of –** PIC, Notifications and Import Responses Databases.
- **54. Iraq, Islamic State of** (i) UNEP-POPS-POPRC.12-11-Add.1. (ii) PIC, Import Responses Database.
- **55. Israel** PIC, Notifications and Import Responses Databases.
- **56. Jamaica** PIC, Notifications and Import Responses Databases.
- **57. Japan** (i) PIC, Notifications Database. (ii) FAO, 2014. Compilation of Questionnaire on Practical Aspects of Pesticide Risk Assessment and Phasing out of HHPs (FAO/APPPC Asia Regional Workshop on Practical Aspects of Pesticide Risk assessment and phasing out of HHPs, 19-22 May 2014, Nanjing, China.
- **58. Jordan** PIC, Notifications and Import Responses Databases.
- **59. Kazakhstan** PIC, Import Responses Database.
- **60. Kenya** PIC, Import Responses Database.

- **61. Korea (North), Democratic People's Republic of** PIC, Import Responses Database. **62. Korea (South), Republic of** (i) List of pesticides banned. Established on June 28th, 2013. Rural Development Administration Notification, No. 2016-46, Government of Korea, via E Consumer, Korea. (ii) FAO, 2014, Compilation of Questionnaire on Practical Aspects of Pesticide Risk Assessment and Phasing out of HHPs (FAO/APPPC Asia Regional Workshop on Practical Aspects of Pesticide Risk assessment and phasing out of HHPs, 19-22 May 2014, Nanjing, China. (iii) PIC, Notifications and Import Responses Databases. (iii) Myung et al. 2015. Paraquat prohibition and change in suicide rate and methods in South Korea. PLOS ONE. DOI:10.1371/journal.pone.0128980.
- **63. Kyrgyzstan** PIC, Notifications and Import Responses Databases.
- **64. Lao PDR** (i) FAO, 2014, Compilation of Questionnaire on Practical Aspects of Pesticide Risk Assessment and Phasing out of HHPs (FAO/APPPC Asia Regional Workshop on Practical Aspects of Pesticide Risk assessment and phasing out of HHPs, 19-22 May 2014, Nanjing, China. (ii) PIC, Import Responses Database. (iii) Asia and Pacific Regional Plant Protection Commission. 2017. Report of the APPC Sub-Regional Training Workshop for the Designated National Authorities on the Rotterdam Convention Focussing on Increasing Notifications. 13-17 March, Surabaya, Indonesia.
- **65. Lebanon** PIC, Import Responses Database.
- **66. Lesotho** PIC, Import Responses Database.
- **67. Libya** PIC, Import Responses Database.
- **68. Liechtenstein** PIC, Import Responses Database.
- **69. Luxembourg** The Government of Luxembourg,
- https://gouvernement.lu/en/actualites/toutes actualites/communiques/2020/01-janvier/16-interdiction-glyphosate.html.
- **70. Macedonia, The Former Yugoslavia Republic of** PIC, Import Responses Database.
- **71. Madagascar** PIC, Import Responses Database.
- **72. Malawi** PIC, Notifications and Import Responses Databases.
- **73. Malaysia** (i) FAO, 2014, Compilation of Questionnaire on Practical Aspects of Pesticide Risk Assessment and Phasing out of HHPs (FAO/APPPC Asia Regional Workshop on Practical Aspects of Pesticide Risk assessment and phasing out of HHPs, 19-22 May 2014, Nanjing, China. (ii) PIC, Notifications Database. (iii) Asia and Pacific Regional Plant Protection Commission. 2017. Report of the APPC Sub-Regional Training Workshop for the Designated National Authorities on the Rotterdam Convention Focussing on Increasing Notifications, 13-17 March, Surabaya, Indonesia.
- **74. Mali** PIC, Notifications and Import Responses Databases.
- **75. Mauritania** PIC. (i) FAO Compilation des Questionnaires Pesticides Tres Dangereux des Pays de l'Afrique de l'Ouest. (ii) PIC, Notifications and Import Responses Databases.
- **76. Mauritius** PIC, Import Responses Database.
- **77. Mexico** PIC. (i) SAICM GRULAC Coordinator Group Survey on the Status of HHP in Latin America 2014. (ii) PIC, Notifications and Import Responses Databases. (iiii) Diario Oficial de la Federación 3 de Enero de 199. (iv) Presidential decree DOF: 06/11/2019. Import banned by presidential decree and there is no national production. DECRETO por el que se modifica la Tarifa de la Ley de los Impuestos Generales de Importación y de Exportación y el Decreto por el que se establece el impuesto general de importación para la region fronteriza y la franja fronteriza norte.
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https://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/active-

<u>substances/?event=search.as</u>. Where a pesticide is banned by another country but is not included in the EU database, the Pesticide Properties Database

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Annex 2 - Pesticides not included in List

The Consolidated List of Banned Pesticides only includes pesticides currently, or potentially, still in use. Listed below, in Part A, are pesticides for which specific bans have been made by one or more countries but which are regarded as being obsolete. It does not include all obsolete pesticides, only those for which specific bans are recorded. The WHO Classification of Pesticides (WHO) is taken as the primary source of information; however, if a pesticide is not included in that list, the Pesticide Properties Database (PPDB) is taken as the secondary source. If a pesticide is not included in either of these as in use or obsolete, it is considered to be obsolete.

Part B includes those chemicals banned as pesticides, but which could not be found in pesticide databases – WHO, PPDB, or the BCPC Compendium –they include adjuvants, metabolites, intermediates and industrial chemicals.

Part A. Pesticides considered to be obsolete

1,1,2,2-tetrachloroethane	camphechlor/toxaphene	crimidine
1,2-dichloropropane	carbamorph carbanolate carbon	crotoxyphos crufomate
2,4,5-T		
2,4,5-TCP	disulphide	cyanofenphos
aldoxycarb	carbophenothion	cyanthoate
aldrin	chlomethoxyfen	cycloheximide
allyxycarb	chloral hydrate	cycluron
amidithion	chloramben	cypendazole
aminocarb	chloranil	cyprofuram
ANTU	chloraniformethan	cypromid
aramite	chloranocryl	DBCP
athidathion	chlorbenside	DDD
atraton	chlorbicyclen	demephion-0
aziprotryne	chlorbromuron	desmetryn
azobenzene	chlorbufam	dialifos
azothoate	chlordecone	diallate
barium carbonate	chlordimeform	diamidafos
benquinox	chlorfenethol	dibutyl phthalate
benthiazuron	chlorfenpop-methyl	dibutyl succinate
benzoximate	chlorfenson	dichlobutrazol
benzoylprop-ethyl	chlorfensulfide	dichlofenthion
binapacryl	chlormebuform	dichlozoline
bisthiosemi	chlornitrofen	dieldrin
bromocyclen	chlorobenzilate	diethatyl
bufencarb	chloromethiuron	difenoxuron
butacarb	chlorophoxim	dimefox
butenachlor	chloropropylate	dimetilan
buthidazole	chlorquinox	dimexano
buthiodate	chlorthiophos	dinex
butonate	cloethocarb	dinoctan
butopyronoxyl	clofop	dinoseb
buturon	coumachlor	dioxabenzophos
cadmiun compounds	coumafuryl	dioxacarb
calcium cyanamide	credazine	dioxathion

dipropetryn
disul
ditalimfos
drazoxolon
eglinazine
endothion
endrin
EPBP
erbon
ESP / oxydeprofos

etacelasil
etaconazole
ethidimuron
ethiolate
ethion
ethoate-methyl
ethoxyhexadiol
etrimfos
EXD
fenaminosulf
fenazaflor

fenchlorphos fenitropan fenoprop / silvex / feoprop

fenson fensulfothion fenthiaprop fenuron flamprop fluazifop fluentil

fluormide flutrimazole fosethian fosmethilan fosthietan furconazole-cis

glyodin glyphosine halacrinate haloxydine

isazophos

furmecyclox

heptachlor heptopargil hexachloracetone hexaflurate hydroxy-MCPA ipazine IPSP

isobenzan isobornylthiocyano acetate isocarbamid
isocil
isodrin
isofenphos
isomethiozin
isonoruron
isopropalin
isothioate
isoxapyrifop
jodfenphos
karbutilate
kelevan

kinetan
leptophos
lithium perfluorooctane
sulfonate (LPOS)
lythidathion
malonoben
mebenil
mecarinzid
mecarphon
medinoterb acetate
menazon

menazon
mephosfolan
methiuron
methoprotryne
methoxyphenone
mexacarbate
MGK repellent 11
mipafox
mirex

monuron

monuron-TCA

morfamquat
myclozolin
napthalic anhydride
nitralin
norbormide
noruron
oxapyrazon
oxydisulfoton
oxydeprofos
parafluron

pentachlorobenzene perfluidone phenisopham phenkapton phenobenzuron phosacetim phosdipen piperophos piproctanyl pirimiphos-ethyl profluralin proglinazine promacyl promecarb propaphos propyl isome prothiocarb prothoate proxan pydanon pyracarbolid pyridinitril pyriminil quinacetol quinamid rvania sabadilla salicylanilide schraden / OMPA /

octamethylpyrophosphora mide secbumeton sesamex simeconazole sodium fluorosilicate / hexafluorosilicate

sulfaquinoxaline
sulfoxide
sulprofos
SWP TDE
telodrin
tepp
terbucarb
tetrasul
thicyofen
thionazine
thiophanate

toxaphene / camphechlor

triamiphos triapenthenol triarimol tricamba trichlamide trichloronat tridiphane trifenmorph trimethacarb trimedlure

thioguinox

PART B. Chemicals not in pesticide databases

2,3,4,5-Bis(2-butylene)
tetrahydro-2-furaldehyde
3-decen-2-one
alkoxy alkyl compounds
amino acids
ammonium thiocyanate
aryl mercury compounds
ATCA
butam
cyometrinil – an adjuvant
not an active ingredient

DDE

ethylene chlorbromide
ethylene glycol bis
ethyl hexanediol
folic acid
fyomone
gentamycin sulfate
HETP
Macex
methyl eugenol
metil neodecanamida
nonylphenol

phosphoric acid

pinolene
plant extracts
polychlorinated terphenyls
(PCTs)
polyterpenes
safrole
sodium trichloroacetate
tetraethyl lead
tris(2,3-dibromopropyl)
phosphate
tri isopropanolamin