PAN International Consolidated
List of
Banned Pesticides

5th Edition, March 2021

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 5th Edition of the Consolidated List of Banned Pesticides (hereafter the Consolidated List), information on banned pesticides was available for 162 countries.

One or more of these countries have banned a total of 460 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 92 newly added active ingredients, including glyphosate banned by 3 countries (Luxembourg, Mexico and Vietnam).

The countries with the most known bans are those of the EU and the UK (175 banned + 208 specifically ‘not approved’ pesticides which are Highly Hazardous Pesticides (HHPs)\(^1\) and/or banned by another country, Sweden (140), Brazil (131), Egypt (76), Saudi Arabia (73), Indonesia (61), Cambodia (60), India (55), Mauritania (52), Palestine (52), and China (51).

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\(^1\) According to PAN Criteria for HHPs; see [http://pan-international.org/wp-content/uploads/PAN_HHP_List.pdf](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.  

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) and/or according to the additional criteria agreed by PAN. It does not include those banned pesticides regarded as being obsolete according to the 2009 WHO Recommended Classification of Pesticides by Hazard. 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.

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.

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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.

New information since the 4th edition

11 new countries and 94 new pesticides have been added since the 4th edition of the Consolidated List, which was issued in March 2019, plus a number of other bans by countries. Three pesticides have been removed.

The new countries are:
Belarus, Botswana, Egypt, Grenada, Liberia, Maldives, North Macedonia, St Kitts and Nevis, St Lucia, Taiwan, and Vanuatu.

Countries removed:
Romania and Netherlands, because all entries for these two are now covered by bans or ‘Not Approved’ by the European Union.

The new pesticides added are:
2-naphtyloxyacetic acid, acifluorfen, allethrin/bioallethrin, ametryn, anilofos, bensultap, biphenyl/diphenyl, bromophos,* bromophos ethyl,* bromopropylate, bromoxynil, butafenacil, butroxydim, carpropamide, cartap, chlorfenac,* chlorflurenol,* chloroneb,* chloroxuron,* chlorthiamid,* choline chloride, cinidon-ethyl, clofentezine, clothianidin, cybutryne, cyclanilide, dichlorprop, didecydimethylammonium chloride, dienochlor,* difloupyr, fluorodifen,* flupyrsulfuron-methyl, flurenol, flurtamone, flusulfamide, fluvalinate,* formothion, glyphosate, glyphosate-trimesium (sulfosate), hydramethylnon, imidacloprid, iminocotadine, iodofenphos, iprobenphos/iprofenfos/IPB, isoproturon, lactofen, lufenuron, MCPA-thioethyl/phenothiol, metolachlor, monalide,* naphthalene,* napropamide, niclosamide, nitrofen,* novaluron, orthosulfamuron, oryzalin, oxadiazon, oxasulfuron, picoxystrobin, prometryn, propazine, pyracarbolide, pyrimidifen, pyroquilon, quinoclamine, quinoxyfen, siduron, sodium fluoride,* spiridiclofen, sulfallate,* tecnazene, thiacloprid, thiamethoxam, thiazafluron,* thiobencarb, thioyclam, thiophanate-methyl, triadimefon, triadimenol, triasulfuron, triclozan, tricyclazole, triflumizole, triflumuron, triforine, vernolate.
* Denotes pesticide previously considered to be obsolete (see section below on obsolete pesticides).

Most of these pesticides were banned by EU and UK, Brazil and/or Switzerland. Glyphosate was banned by Luxembourg, Mexico and Vietnam.

Countries with the most newly-added bans:
Switzerland (113)
EU and UK (74) (bans + not approved)
Brazil (47)
Indonesia (23)
Morocco (19)
Nepal (18)
**Pesticides removed are:**

**Cyromazine** – it was previously listed as a ban for Sri Lanka, but the ban was rescinded. Although the approval in the EU has been revoked, it is not actually banned. As it is not identified as an HHP, it is removed from this list.

**Sodium dimethyl dithiocarbamate** – it is not approved by EU; however, it is no longer included in the PAN HHP List because it is no longer included in the US EPA Annual Cancer Report 2018.

**TCA-sodium** – EU not approved but no longer on the PAN HHP List.

**Triamiphos** – 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 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 in the European Chemicals Agency (ECHA) database as pesticides banned. However, this does not give the full picture. In the EU pesticides must be on the positive, or approved, list before they can be registered in any of the EU Member States. More than 800 pesticides 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/eu-pesticides-database/active-substances/?event=search.as](https://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/active-substances/?event=search.as).

It can also happen that active ingredients on the EU positive list may not be registered in all or even any of the EU member states, if no company applies for registration 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.

**Obsolete pesticides**

The List does not include pesticides regarded as obsolete, either by *The WHO Recommended Classification of Pesticides by Hazard and Guidelines to Classification 2019*, or if that is silent on a pesticide, by the University of Hertford’s Pesticide Properties Database (PPDB), unless there is evidence that the pesticide is still in use.

Occasionally, evidence is found that a pesticide that has been considered as obsolete is still in use. The 2019 WHO Classification contains a number of pesticides that were previously considered obsolete but are not considered obsolete anymore, and this accounts for the addition of several new pesticides to this list (see pesticides with an * under the section *The new pesticides added are*. The bans are not new but the discovery that they are not obsolete, is. Where neither the WHO Classification nor the PPDB nor the EU approvals database mention a pesticide, it is regraded here as either obsolete or not recognised as a pesticide. The country entries for these pesticides should be considered incomplete.

**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

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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 panap@panap.net, as well as at [http://pan-international.org/](http://pan-international.org/)

*Prepared by Dr Meriel Watts, PANAP, on behalf of PAN International*

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**Annex 1: Sources of Information by Country**

**Key:**


1. **Albania** – PIC, Import Responses Database.
4. **Armenia** – PIC, Notifications and Import Responses Databases.
6. **Bahrain** – PIC, Import Responses Database.
8. **Belize** – PIC, Import Responses Database.
10. **Bolivia, Plurinational State of** – PIC, Import Responses Database.
11. **Bosnia & Herzegovina** – PIC, Import Responses Database.
13. **Burkina Faso** – PIC, Notifications Database.
14. **Burundi** – PIC, Import Responses Database.
15. **Cabo Verde** – PIC, Notifications and Import Responses Databases.
19. **Chad** – PIC, Notifications and Import Responses Databases.


23. Congo – PIC, Import Responses Database.


25. Cook Islands – PIC, Import Responses Database.


29. Dominica – PIC, Import Responses Database.


32. Egypt – Annex No. (3) Ministerial Resolution No. 630 of 2007 dated May 3, 2007. List of active ingredients for agricultural pesticides for which registration, re-registration, import, circulation, processing, manufacture or experimentation is prohibited for the purpose of registering any of them in the Arab Republic of Egypt, whether they are raw materials or commercial preparations in any form. https://www.agricultureegypt.com/News/34057/%D9%86%D9%86%D9%81%D8%B1%D8%AF_%D8%A8%D9%86%D8%B4%D8%B1_ http://kenanaonline.com/users/magicservice/posts/125309

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.

38. EU not approved – EU Pesticides Database
https://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/active-substances/?event=search.as. 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.
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.
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.
49. Guyana – PIC, Notifications and Import Responses Databases.
50. Honduras – PIC, Import Responses Database.
53. Iran, Islamic Republic of – PIC, Notifications and Import Responses Databases.
55. Israel – 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.
65. Lebanon – PIC, Import Responses Database.
66. Lesotho – PIC, Import Responses Database.
67. Libya – PIC, Import Responses Database.
68. Liechtenstein – PIC, Import Responses Database.
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.
74. Mali – PIC, Notifications and Import Responses Databases.
76. Mauritius – PIC, Import Responses Database.
78. Moldova, Republic of – PIC, Import Responses Database.


87. Nigeria – PIC, Notifications Database.


89. Oman – PIC, Notifications and Import Responses Databases.

90. Pakistan – (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.


92. Panama – PIC, Notifications and Import Responses Databases.


94. Paraguay – PIC, Notifications and Import Responses Databases.


97. Qatar – PIC, Import Responses Database.

98. Russian Federation – PIC, Import Responses Database.

99. Rwanda – PIC, Import Responses Database.
100. Samoa – PIC, Import Responses Database.
101. Sao Tome and Principe – PIC, Import Responses Database.
102. Saudi Arabia – PIC, Notifications and Import Responses Databases.
103. Senegal – PIC, Notifications and Import Responses Databases.
104. Serbia – PIC, Import Responses Database.
109. Sudan – PIC, Import Responses Database.
111. Sweden – PIC, Notifications Database.
112. Swaziland – PIC, Import Responses Database.
114. Syria – PIC, Notifications and Import Responses Databases.
116. Tanzania, United Republic of – PIC, Import Responses Database.
Rotterdam Convention Focussing on Increasing Notifications, 13-17 March, Surabaya, Indonesia. (iii) PIC, Notifications Database.

118. Togo – PIC, Notifications and Import Responses Databases.

119. Tonga – PIC, Import Responses Database.

120. Trinidad & Tobago – PIC, Notifications and Import Responses Databases.

121. Tunisia – PIC, Import Responses Database.


123. Uganda – PIC, Import Responses Database.

124. United Arab Emirates – PIC, Import Responses Database.

125. UK banned – (i) ECHA, Chemicals subject to PIC https://echa.europa.eu/information-on-chemicals/pic/chemicals selected: Annex 1 + pesticides + banned (downloaded 26 Nov 2020); (ii) PIC, Notifications Database.

126. UK not approved – EU Pesticides Database https://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/active-substances/?event=search_as. 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.


128. USA – i) POPs Review Committee; ii) US EPA chemsearch: https://iaspub.epa.gov/apex/pesticides/?p=chemicalsearch1. II) OEHHA: https://oehha.ca.gov/chemicals. iii) Suspended Cancelled and Restricted pesticides, US EPA. https://nepis.epa.gov/Exe/ZyNET.exe/20011E0G.TXT?ZyActionD=ZyDocument&Client=EP A&Index=1986+Thru+1990&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=0 &IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=%3A%5Czyfiles%5CIndex%20Data%5C86thru90 %5CTX%5C00000015%5C20011E0G.txt&User=ANONYMOUS&Password=anonymous&So rtMethod=h%7C- &MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i42 5&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Res ults%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL=


131. Yemen – PIC, Import Responses Database.
133. Zimbabwe – (i) Personal communication from Pesticides Registration Officer, Ministry of Agriculture, Mechanisation and Irrigation Development. (ii) PIC, Import Responses Database.