

# EU REG. 2019/1702 PRIORITY PESTS: SUMMARY INFORMATION

(V.1: 11/02/2020)

NO.	PEST/ VECTOR SPEICES	HOST PLANT SPECIES	NATIVE DISTRIBUTION & INTRODUCTIONS	INTRODUCTION PATHWAYS/ DISPERSAL
1	<i>Agrilus anxius</i> <b>(Bronze Birch Borer)</b>	Specialist wood borer of <i>Betula</i> spp. In North America <i>A. anxius</i> is mostly a secondary pest on weakened trees but also known to attack healthy trees. The European species <i>B. pendula</i> and <i>B. pubescens</i> are highly susceptible to widespread attack and tree mortality. Eradication is impossible once found in the wider environment.	Native to USA and Canada. <b>Absent from EU and EPPO region.</b>	<ul style="list-style-type: none"> <li>Plants for planting.</li> <li>Wood and scrap wood.</li> <li>Wood chips including wood fuel.</li> <li>Wood packaging material.</li> </ul>
2	<i>Agrilus planipennis</i> <b>(Emerald Ash Borer)</b>	Specialist wood borer of <i>Fraxinus</i> spp.  Expansion of the Moscow introduction is a major threat to <i>Fraxinus excelsior</i> (European ash) population already weakened from extensive Ash Die back infestation.  Eradication impossible once established in the wider environment.	Native to north east China, Korea, Mongolia, Japan and Russia (Far East). <b>Introductions:</b> <u>North America:</u> Michigan (2002). Established and widespread over USA and southern Canada. Eradication not feasible, management measures in place. <u>Russia:</u> Detected in Moscow (2003). Controls absent, distribution continues to expand & reported in Ukraine (2019).	<ul style="list-style-type: none"> <li>Plants for planting &amp; foliage.</li> <li>Wood and scrap wood.</li> <li>Wood chips including wood fuel.</li> <li>Wood packaging material.</li> <li>'Hitch hiking' on vehicles.</li> <li>Natural dispersion: strong fliers – 1 to 9.8km.</li> </ul>
3*	<i>Anastrepha ludens</i> <b>(Mexican Fruit Fly)</b>	Citrus spp. is the most important. Also found in Mangoes, Guavas and Peaches.	Mexico, USA (Texas), Central and South America (Argentina, Colombia). <b>Absent from EPPO region.</b>	<ul style="list-style-type: none"> <li>International trade of fruit.</li> <li>Larvae in soil and packaging.</li> <li>Adults can fly up to 135 km.</li> </ul>
4	<i>Anoplophora chinensis</i> <b>(Citrus longhorn beetle)</b>	<i>Anoplophora chinensis</i> is a polyphagous pest and can attack plants of more than 20 families of the following genera: <i>Acer</i> spp., <i>Platanus</i> spp., <i>Betula</i> spp., <i>Fagus</i> spp., <i>Corylus</i> spp., <i>Rosa</i> spp., <i>Malus</i> spp., <i>Pyrus</i> spp., <i>Prunus</i> spp., <i>Populus</i> spp., <i>Ulmus</i> spp. and <i>Salix</i> spp. It is also regarded as a serious pest of fruit trees, especially <i>Citrus</i> spp. in China. In Italy CLB primarily attacks species of <i>Acer</i> (48%), <i>Platanus</i> spp. (15%), <i>Betula</i> spp. (14%), <i>Carpinus</i> spp. (7%) and <i>Fagus</i> spp. (5%).	Indigenous to eastern Asia and widely spread in China, Korean & Japan. <b>Introductions:</b> <u>USA:</u> 4 separate introductions subsequently eradicated. <u>Europe:</u> 7 infestations eradicated. <u>Italy:</u> Detected (2000) with total of 49 infestations. Established in Lombardy over 100 Km <sup>2</sup> . Eradication not feasible, containment measures in place.	<ul style="list-style-type: none"> <li>Plants for planting particularly <i>Acer</i> spp (bonsai) from Asia.</li> <li>Wood and scrap wood.</li> <li>'Hitch hiking' on vehicles.</li> </ul>

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5	<p><i>Anoplophora glabripennis</i></p> <p><b>(Asian longhorn beetle)</b></p>	<p>Major host – <i>Populus</i> and <i>Salix</i> spp Various other woody plants have also been recorded as hosts in China: <i>Acer</i>, <i>Alnus</i>, <i>Malus</i>, <i>Morus</i>, <i>Platanus</i>, <i>Prunus</i>, <i>Pyrus</i>, <i>Robinia</i>, <i>Rosa</i>, <i>Sophora</i> and <i>Ulmus</i>.</p> <p>The major host in the UK 2012 outbreak was <i>Acer pseudoplatanus</i> (sycamore).</p>	<p>Indigenous to China. <b>Introductions:</b> <u>USA/ Canada:</u> Numerous outbreaks and eradications since initial detection in New York (1996). Current eradications in Ohio, Long Island, Massachusetts and Toronto. <u>Europe:</u> Outbreaks in France, Italy, Germany are under eradication. <u>UK (Kent):</u> Outbreak eradicated in 2012.</p>	<ul style="list-style-type: none"> <li>• Wood packaging material (306 EU interceptions 1999 – 2013).</li> <li>• Plants for planting</li> <li>• Natural dispersion: single flights – 0.75 - 1km.</li> </ul>
6	<p><i>Anthonomus eugenii</i></p> <p><b>(Pepper weevil)</b></p>	<p>Main hosts are cultivated <i>Capsicum</i> spp., Other Solanaceae are also attacked, including aubergines (<i>Solanum melongena</i>) and many wild <i>Solanum</i> spp. A possible glasshouse pest, (2 outbreaks in Canada)</p>	<p>Indigenous in Mexico. Spread to and widespread in southern USA, Central America and Caribbean. <b>Absent from EU region.</b></p>	<ul style="list-style-type: none"> <li>• International trade of Capsicums &amp; Aubergines.</li> </ul>
7	<p><i>Aromia bungii</i></p> <p><b>(Red necked Longhorn Beetle)</b></p>	<p>The main hosts are <i>Prunus</i> spp. In Europe the species has been reported in <i>P. domestica</i> (plum), <i>P. cerasifera</i> (cherry plum), a common rootstock of stone fruit, <i>P. armeniaca</i> (apricot), <i>P. avium</i> (cherry), <i>P. persica</i> (peach) and on <i>P. dulcis</i> (almond).</p>	<p>Native to East Asia. <b>Introductions:</b> <u>Italy:</u> Initial outbreak 2012, now established in Campania and Lombardy. Eradication not feasible, containment measures in place. <u>Germany</u> – 4 separate detections with 2 outbreaks in Bavaria under eradication.</p>	<ul style="list-style-type: none"> <li>• Wood packaging material is the primary introduction pathway.</li> <li>• ‘Hitch hiking’ on imported goods.</li> <li>• Plants for planting (less likely)</li> </ul>
8	<p><i>Bactericera cockerelli</i></p> <p><b>(Potato psyllid)</b></p>	<p>Cultivated and weed species in family Solanaceae, crop plants such as potato (<i>Solanum tuberosum</i>), tomato (<i>Solanum lycopersicon</i>), pepper (<i>Capsicum annuum</i>), eggplant (<i>Solanum melongena</i>), and tobacco (<i>Nicotiana tabacum</i>), and non-crop species such as nightshade (<i>Solanum</i> spp.), groundcherry (<i>Physalis</i> spp.) and matrimony vine (<i>Lycium</i> spp.). Adults have been collected from numerous other plant families.</p>	<p>Native to South-Western USA and Northern Mexico. Present in Canada, Mexico, USA, Central America and New Zealand (first detected 2006). <b>Absent from EU and EPPO region.</b></p>	<ul style="list-style-type: none"> <li>• Commercial trade of plants in the family Solanaceae.</li> <li>• Adults are very strong fliers and can migrate several hundreds of km.</li> </ul>

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9	<i>Bactrocera dorsalis</i> <b>(Oriental Fruit Fly)</b>	Wide range of fruit crops, for example in China and Japan on <i>Annona squamosa</i> , apples ( <i>Malus pumila</i> ), <i>Averrhoa carambola</i> , bananas ( <i>Musa</i> ), <i>Capsicum</i> , guavas, mangoes, oranges ( <i>Citrus sinensis</i> ), pawpaws ( <i>Carica papaya</i> ), peaches ( <i>Prunus persica</i> ), plums ( <i>Prunus domestica</i> ), <i>Pyrus</i> spp. and tomatoes ( <i>Lycopersicon esculentum</i> ).	Asia, Indian subcontinent, USA – California, Florida) Guam.  <b>Absent from EU and EPPO region.</b>	<ul style="list-style-type: none"> <li>• Commercial trade of infested fruits.</li> <li>• Many <i>Bactrocera</i> species can fly 50 - 100 km.</li> </ul>
10*	<i>Bactrocera zonata</i> <b>(Peach Fruit Fly)</b>	The main hosts are guava, mango and peach. Secondary hosts include apricot, fig and citrus. <i>B. zonata</i> has been recorded on over 50 cultivated and wild plant species.	Asia - Bangladesh, India, Indonesia Iran. Middle East, Egypt. USA – California.  <b>Absent from EU and EPPO region.</b>	<ul style="list-style-type: none"> <li>• Commercial trade of infested fruits.</li> <li>• Many <i>Bactrocera</i> species can fly 50 - 100 km.</li> </ul>
11	<i>Bursaphelenchus xylophilus</i> (Nematode) <i>Monochamus</i> spp. (Vector)  <b>Pine Wood Nematode/ Sawyer Beetles</b>	<i>Bursaphelenchus xylophilus</i> completes its life cycle on coniferous species belonging to the genera <i>Abies</i> , <i>Picea</i> , <i>Pinus</i> , <i>Larix</i> , <i>Cedrus</i> and <i>Pseudotsuga</i> . Pine wilt resulting in tree mortality tends to be in the genus <i>Pinus</i> .	Native and widespread in Canada & USA. Introduced into Japan (1905), China (1982), Korea (1988) and Taiwan (1985). <b>EU Introductions:</b> <u>Spain</u> (2008) <u>Portugal</u> Mainland (1999), Madeira (2009), now widespread over most of mainland Portugal. Eradication in Spain and Portugal is now impossible, containment measures being applied in both countries.	<ul style="list-style-type: none"> <li>• Plants for planting.</li> <li>• Wood packaging material.</li> <li>• Natural dispersion: Adult vector beetles <i>Monochamus</i> spp. are active fliers transporting the nematode.</li> </ul>
12*	<i>Candidatus Liberibacter</i> spp., V: <i>Trioza eritreae</i> <b>(Citrus Greening Disease)</b>	All commercial citrus species and cultivars are susceptible.	China, South Africa, Phillipines, India, Indonesia. > 50 countries. Vector insect <i>Diaphorina citri</i> distribution wider than the bacterium. <b>Absent from EU region.</b>	<ul style="list-style-type: none"> <li>• Plants for planting.</li> <li>• Movement of vectors.</li> </ul>

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13	<i>Conotrachelus nenuphar</i> <b>(Plum weevil)</b>	Main hosts are: Amelanchier arborea, A.canadensis, cherries ( <i>Prunus avium</i> and <i>P. cerasus</i> ), <i>Crataegus</i> spp., <i>Malus domestica</i> , <i>Malus</i> spp., peaches, pears, plums, <i>Prunus alleghaniensis</i> , <i>P. americana</i> , <i>P. maritima</i> , <i>P. pensylvanica</i> , <i>P. pumila</i> , <i>P. salicina</i> , <i>P. serotina</i> , <i>P. virginiana</i> and <i>Sorbus aucuparia</i> . Besides its rosaceous main hosts, <i>C. nenuphar</i> can also be found on <i>Ribes</i> spp. and <i>Vaccinium</i> spp.	Native weevil in North America, was originally a pest of native rosaceous plants but now a major pest of commercial crops.  Present in Canada, USA.  <b>Absent from EU and EPPO region.</b>	<ul style="list-style-type: none"> <li>• Pupae in soil.</li> <li>• Adults in packing material.</li> </ul>
14	<i>Dendrolimus sibiricus</i> <b>(Siberian Silk Moth)</b>	<i>D. sibiricus</i> and <i>D. superans</i> can damage more than 20 species of <i>Abies</i> , <i>Pinus</i> , <i>Larix</i> , <i>Picea</i> and <i>Tsuga</i> .	Present in Russia (spreading westwards), China, Kazakhstan, Democratic People's Republic of Korea, Republic of Korea and Mongolia.  <b>Absent from EU region.</b>	<ul style="list-style-type: none"> <li>• Plants for planting.</li> <li>• Cut branches (including Christmas trees).</li> <li>• Eggs and larvae with wood carrying bark.</li> <li>• Hitchhiker on other products.</li> <li>• Adult moths can fly up to 100 km per year</li> </ul>
15*	<i>Phyllosticta citricarpa</i> <b>(Black spot of Citrus)</b>	Principal hosts are <i>Citrus</i> species: <i>C. limonia</i> , <i>C. nobilis</i> , <i>C. poonensis</i> , <i>C. tankan</i> , grapefruits ( <i>C. paradisi</i> ), lemons ( <i>C. limon</i> ), limes ( <i>C. aurantifolia</i> ), mandarins ( <i>C. reticulata</i> ), oranges ( <i>C. sinensis</i> ). There is also a large non citrus host list.	Citrus black spot, originating in south-east Asia, spread to Australia, South Africa and China many years ago. <b>EPPO Region:</b> present in Egypt, Israel, Italy (Sicily), Lebanon, Spain	<ul style="list-style-type: none"> <li>• Plants for planting.</li> <li>• Commercial trade of infested fruits.</li> </ul>

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16	<i>Popillia japonica</i> <b>(Japanese beetle)</b>	Polyphagous pest to over 300 plant species. Hosts include trees such as Acer, Betula, Fagus, Juglans, Larix, Malus, Populus, Prunus, Quercus, Tilia and Ulmus. Shrub hosts include Althaea, Hibiscus, Rhododendron, Rosa, Vaccinium and Viburnum. Soft fruit crops include Fragaria, Rubus and Vitis. Field crops include Asparagus officinalis, Glycine max and Zea mays. Adults are defoliators, skeletonising leaves but they can also feed on fruit. Larvae are known to feed on the roots of grasses (e.g. Festuca, Poa, Lolium) and pasture plants such as Trifolium. Larvae can also be pests of lawns, golf courses and pastures and cause damage to roots of vegetables and nursery stock.	Native in northern China, Japan and the Far East of Russia. <b>Introductions:</b> <u>North America</u> (1916) and has become a serious pest. Azores islands (1970's). <u>Italy</u> (2014); Initial detection adjacent to two airports in Milan. Eradication not feasible and expansion into Switzerland now inevitable.  Eradication impossible if found in the wider environment.	<ul style="list-style-type: none"> <li>• Eggs, larvae and/or pupae in soil and growing media accompanying host plants for planting.</li> <li>• Soil from tools and machinery,</li> <li>• Plants for planting with foliage leaf and flower feeding adults,</li> <li>• Cut flowers with flower feeding adults,</li> <li>• Adults hitchhiking on aircraft, vehicles, etc.</li> </ul>
17	<i>Rhagoletis pomonella</i> <b>(Apple maggot fly)</b>	Natural host plants in North America are <i>Crataegus</i> spp. Apples ( <i>Malus pumila</i> ) are now the principal host, also records for other <i>Malus</i> spp. and some <i>Prunus</i> spp.	North America: Canada and USA. <b>Absent from EU and EPPO region.</b>	<ul style="list-style-type: none"> <li>• International trade of infested fruits.</li> <li>• Pupae in soil or packaging with plants which have already fruited.</li> </ul>
18	<i>Spodoptera frugiperda</i> <b>(Fall armyworm)</b>	A polyphagous pest of Poaceae spp.. It is most commonly recorded from grasses and from maize, rice, sorghum and sugarcane. Also recorded on cotton, Brassicaceae, Cucurbitaceae, groundnuts, lucerne, onions, <i>Phaseolus</i> , sweet potatoes, tomatoes and other Solanaceae.	Canada, USA, Mexico, Central America, Caribbean and South America. <b>Absent from EU and EPPO region.</b>	<ul style="list-style-type: none"> <li>• International trade of fruit &amp; vegetables.</li> <li>• International trade of herbaceous ornamentals.</li> <li>• Adults migrate over long distances.</li> </ul>
19*	<i>Thaumatotibia leucotreta</i> <b>(Citrus Codling Moth)</b>	Larvae can damage more than 70 plant species, feeding inside fruits, nuts, maize ears or cotton bolls. Eggs occur on fruit, leaves, fallen fruit, smooth-surfaced tissue.	Africa, Israel. Widespread EU interceptions on <i>Capsicum</i> , <i>Citrus fruits</i> , <i>Prunus</i> fruits and rose cut flowers.	<ul style="list-style-type: none"> <li>• International trade of fruit &amp; vegetables.</li> </ul>

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20	<p><i>Xylella fastidiosa</i></p> <p>Vector: <i>Philaeus spumarius</i></p> <p><b>(Disease: Leaf Scorch Disease)</b></p> <p><b>(Vector: Meadow spittle Bugs)</b></p>	<p>563 plant species reported to be infected by <i>X. fastidiosa</i>. Highest risk hosts in the EU are <i>Coffea spp.</i>, <i>Olea europaea L.</i>, <i>Lavandula dentata L.</i>, <i>Nerium oleander L.</i>, <i>P. myrtifolia L.</i> and <i>Prunus dulcis</i>.</p> <p>Other principal hosts are grapevine (<i>Vitis vinifera</i>), Peaches (<i>Prunus persica</i>), Plums (<i>Prunus domestica</i>), apricots (<i>P. armeniaca</i>). Also attacks: <i>Acer rubrum</i>, <i>Morus rubra</i>, <i>Platanus occidentalis</i>, <i>Quercus rubra</i>, <i>Ulmus americana</i> and <i>Vinca minor</i>.</p> <p>Three subspecies – <i>pauca</i> (Italy), <i>multiplex</i> &amp; <i>fastidiosa</i> (France, Spain &amp; Portugal) implicated in EU outbreaks. <i>Multiplex</i> poses the highest risk for northern Europe.</p> <p>Virtually all insects that feed predominantly on xylem fluid are potential vectors. The Meadow spittlebug (<i>Philaeus spumarius</i>) is the major vector in Europe.</p>	<p>Present in India, Taiwan. Mexico, USA, Central America, Caribbean, South America.</p> <p><b>European outbreaks:</b></p> <p><u>Italy:</u> Apulia region (2013), Tuscany (2018). Eradication not feasible, containment measures in place.</p> <p><u>France:</u> Provence Alpes Cote d'Azur (PACA) and Corsica (2015).</p> <p><u>Spain:</u> Balearic Islands - Mallorca, Menorca (2016) and Ibiza (2017). Eradication not feasible, containment measures in place.</p> <p>Mainland – Alicante, Madrid and Andalucia (2018).</p> <p><u>Portugal:</u> Municipality Vila Nova de Gaia (2019). Eradication not feasible.</p>	<ul style="list-style-type: none"> <li>Plants for planting.</li> <li>Infested Vector hitch hiking.</li> <li>Movement of infected vectors in tourist areas.</li> </ul>

## \* EU Priority Pests which cannot become established or spread in Ireland.

3	<i>Anastrepha ludens</i>	<b>(Mexican Fruit Fly)</b>
10	<i>Bactrocera zonata</i>	<b>(Peach Fruit Fly)</b>
12	<i>Candidatus Liberibacter spp</i>	<b>(Citrus Greening Disease)</b>
14	<i>Phyllosticta citricarpa</i>	<b>(Black spot of Citrus)</b>
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