



Fostering Agricultural Markets Activity II (FARMA II)

This assistance is from the American and Swedish people

Annex 1

The list of the most potentially harmful organisms that will be assessed for B&H – RATIONALE

HARMFUL ORGANISMS	CLASSIFICATIONS	STATUS OF HARMFUL ORGANISMS	CATEGORY	IMPORT CHECK	PLACE OF CHECK	MOTIVATION/CLARIFICATION
<i>Halyomorpha halys</i> brown marmorated stink bug (BMSB)	Insect	Absent. No data	Fruit	No	Pear orchards	<u>Economic Impact</u> BMSB is polyphagous, and is a pest of several important crops in its native range. In Japan it attacks shade and fruit trees, vegetables, and leguminous crops (Hoebeke 2002). In southern China, it feeds on flowers, stems and pods of various legumes, and also on: flowers of hibiscus, stems of celosia, fruits of black night-shade, malabar/Indian/ceylon spinach, apple, cherry, Citrus spp., fig, Japanese apricot, and Zuccarini, Japanese persimmon, mulberry, peach, pear, the princess tree, and soybean. Nielson and Hamilton (2009) conducted an extensive study of BMSB populations at farms in New Jersey and Pennsylvania, and found approximately 25% damage per fruit tree. These studies critically indicate the potentially increasing pest pressure that may occur in tree fruits, particularly pears, apples, and peaches, as a result of the introduction of BMSB. Based on the quantity of production pears in BH is at fourth place and it is host of this insect. The production of pears is 8% of the total fruit production. The organism is present in Serbia and it could be a potential risk for BH agricultural production.
<i>Anoplophora glabripennis</i> Asian longhorn beetle “Starry sky”	Insect	Absent. No data	Plants intended for planting, other than seeds, genera and species: Acer spp., Aesculus, Alnus spp., Betula spp., Carpinus spp., Citrus spp., Corylus spp., Cotoneaster spp., Fagus spp., Lagerstroemia spp., Malus spp.,	YES Visual inspection of sensitive herbs taking samples to the presence of a harmful organism.	Forest workers and forest areas, public areas	<u>Economic impact</u> Anoplophora glabripennis is an A1 quarantine organism for EPPO. The Asian long-horned beetle (Anoplophora glabripennis) (ALB) is an invasive pest from Asia that came to Canada, the United States and Europe concealed in solid wood packing material. Asian longhorn beetles primarily attacks tree species and represents a dangerous harmful hardwood organism. As a primary harmful organism, it kills a wholly healthy tree and expands rapidly. Asian longhorn beetles (Anoplophora glabripennis) is serious quarantine pest and treat to deciduous trees in parks and forests of Bosnia and Herzegovina. The damage pest can caused are comparable with dying of elms and chestnut cancer together. In order to prevent the spread of this pest in Bosnia and Herzegovina, it is

			Platanus spp., Populus spp. Prunus laurocerasus, Pyrus spp., Rosa spp., Salix spp., Cornus spp., Crataegus spp., And Ulmus spp.,			extremely important that pest be recognized as soon as possible and that the information is transmitted to the competent services. In the USA, suppressing a 1996 infestation in New York State cost more than 4 million USD (USDA, 1998). <i>A. glabripennis</i> caused the destruction of thousands of trees in the USA and eradication campaigns have cost 800 million USD (http://www.nonnativespecies.org/factsheet/downloadFactsheet.cfm?speciesId=242).
<i>Anoplophora chinensis</i> . Asian longhorned beetles (Chienese longhorned beetles)	Insect	Absent. No data	Plants intended for planting other than seeds, genera and species: Acer spp., Aesculus, Alnus spp., Betula spp., Carpinus spp., Citrus spp., Corylus spp., Citrus spp., Corylus spp., Cotoneaster spp. Fagus spp., Lagerstroemia spp., Malus spp., Platanus spp., Prunus laurocerasus, Pyrus spp., Rosa spp., Salix spp., Cornus spp., Crataegus spp., And Ulmus spp.	YES Imported consignments of seeds and seedlings, visual inspection of material and sampling in case of doubt as well as laboratory testing.	Forest workers and forest areas, public areas ⁴	<u>Economic impact</u> <i>Anoplophora chinensis</i> is an A2 quarantine organism for EPPO. <i>Anoplophora chinensis</i> can cause serious damage to healthy fruit, ornamental and amenity trees. In Asia, <i>Anoplophora chinensis</i> is the most important cerambycids in citrus orchards. In Italy, the damage caused by citrus longhorn beetles has been in urban area. Most of the trees grown in cities and towns in England and Wales are potential hosts including citrus, apples, beech, birch, hawthorn, hazel, horse chestnut, plane, poplar, oak and willow. Between 2001 and 2013, Lombardy plant health service spent €180 million on eradication measures, including the removal of over 25,000 trees , however the pest may have spread too far for eradication to be practical. (https://planthealthportal.defra.gov.uk/assets/factsheets/CLB-Plant-Pest-Factsheet-update-May2016v5.pdf). With a spectrum of more than 40 host plants, it presents a potential threat to the natural environment, fruit and woody trees and ornamental plants. Unlike other similar harmful organisms that primarily attack dead trees, this harmful organism when once come to a certain area, it is very difficult and expensive to eradicate it. <i>Anoplophora chinensis</i> is now present in Croatia.

<p><i>Thaumatotibia leucotreta</i> False codling moth</p>	<p>Insect</p>	<p>Absent. No data</p>	<p>70 host plants within 40 plant families. It can attack many cultivated and wild fruit species such as avocado (American Persea), cocoa (Theobroma cacao), carambola (Averrhoa carambola), citrus species (especially <i>C. sinensis</i> and <i>C. paradisi</i> but <i>C. limon</i> is considered to be an unsuitable host), coffee (<i>Coffea</i> spp.), guava (<i>Psidium guajava</i>), litchi (<i>Litchisinenensis</i>), macadamia (<i>Macadamia ternifolia</i>), peach (<i>Prunus persica</i>), pepper (<i>Capsicum</i> spp.), persimmon (<i>Diospyros kaki</i>) <i>Punicagranatum</i>). It is also a pest of field crops such as beans (<i>Phaseolus</i> spp.), Cotton (<i>Gossypium hirsutum</i>), castor bean (<i>Ricinus communis</i>) and maize (<i>Zea mays</i>).</p>	<p>YES, IMPORT</p>	<p>Citrus; Cotton; Stone fruits.</p>	<p>Economic Impact <i>Thaumatotibia leucotreta</i> is a pest of economic importance to several crops, including: corn, cotton, citrus, litchi, macadamia, peach and plum, throughout sub-Saharan Africa, South Africa, and the islands of the Atlantic and Indian Oceans. <i>T. leucotreta</i> is on EPPO A2 list. On oranges, <i>T. leucotreta</i> caused 2-5% damage on Valencia and Navel oranges in 1954 (USDA 1984), but yield losses have been as great as 10-20%. <i>Thaumatotibia leucotreta</i> has caused significant yield losses ($\geq 30\%$) to macadamia crops in Israel and South Africa (La Croix and Thindwa 1986a, Wysoki 1986). In Ugandan cotton, <i>T. leucotreta</i> caused 20% loss of early sown varieties and 42 - 90% loss of late varieties (Byaruhanga 1977). The Port of Leghorn is one of the major points of entry into Italy for commodities coming from non-EU countries, subject to the monitoring of plant health (TOSCANA, 2014). In 2013, the Phytosanitary inspection activities carried out in the Port of Leghorn authorized the entry into the European Union of about 92.000 tons of fresh fruit which corresponds to an estimated economic value of 70 million euros, of which 42 million is Citrus, 27 million is Pomaceae and 1 million stone fruit and other fruits. Altogether, the amount of fresh fruit imported from South Africa, Argentina and Chile is about 90% of the total. Specifically Citrus fruits, which are imported during the period from May to October, come mainly from South Africa (60%) and Argentina (25%) (TOSCANA, 2014). During the inspection 20 cartons randomly chosen containing 65 oranges each (for a total of 1.300 orange fruits) were singly examined. The 2% of fruits presented the yellowish-brown rind around the oviposition hole and one larva of Lepidoptera Tortricidae, in each orange, that fed just below the fruit surface (Fig. I, 2). It is noteworthy that 2% is also the current fruit loss level in South Africa due to this pest (EPPO, 2013). The damage on Citrus is highly variable from orchard to orchard and from season to season, but can reach up to 90%. The damage on cotton damage caused by <i>T. leucotreta</i> is similar to <i>Pectinophora gossypiella</i>. Larvae penetrate cotton bolls, they first mine in the walls of the bolls and then feed on the seeds. Infested bolls are then often invaded by secondary rots. Larval presence is often characterized by the occurrence of a filamentous waxy secretion protruding from the entry hole. The damage on stone fruits: larvae bore into the fruit at the stem end and begin to feed around the stone. Infestation may be detected by the presence of brown.</p>
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