

## 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>Xylella fastidiosa</i> cause olive leaf drying „Olive Quick Decline Syndrome“	Bacteria	Absent, no data	Fruit, grape, ornamental plants	Ornamental plants	<i>Polygala mirtifolia</i> in maritime places, plum orchards, olive trees and vineyards	<u>Economic impact</u> Xylella fastidiosa is a bacterium that affects many plant species around the world. Xylella fastidiosa is an A2 quarantine organism on EPPO list. In Brazil <b>1.8 million citrus trees</b> are now infected, and some growers in São Paulo state are now planting mangoes instead of citrus. In California, it causes <b>over \$100 million</b> in yearly losses to the grape industry. And in Italy, around <b>one million olive trees</b> are estimated to be infected on the peninsula of Salento. ( <a href="http://data.daff.gov.au/data/warehouse/9aab/2017/EcoImpactsXylella/EcoImpactsXylellaFastidiosa_20171123_v1.0.0.pdf">http://data.daff.gov.au/data/warehouse/9aab/2017/EcoImpactsXylella/EcoImpactsXylellaFastidiosa_20171123_v1.0.0.pdf</a> ). X. fastidiosa was discovered near Lecce, Italy in 2013. Since the initial outbreak, it has invaded <b>23,000 ha</b> of olives in the Apulian Region, southern Italy, and is of great concern throughout Mediterranean basin. Therefore, predicting its spread and estimating the efficacy of control are of utmost importance. In the EPPO region, grapevine and citrus are clearly the most significant potential hosts, though peach is also important. Many other hosts could carry the bacterium, without necessarily being significantly affected themselves ( <a href="https://gd.eppo.int/taxon/XYLEFA">https://gd.eppo.int/taxon/XYLEFA</a> ). In Bosnia and Herzegovina there are about 24 million plum trees, pears, apples, cherries, peaches, walnuts, and 13.5 million grape vines ( <i>all Xylella hosts</i> ). Among the fruit, plum is the most vulnerable species and in BiH is the most productive fruit with a large share in export. Beside above mentioned, but not less important is that in southern part of Herzegovina are planted over <b>200 ha olive trees</b> who are in danger of being invaded with this bacteria, because we import many seedlings from Italy at this moment.
<i>Flavescence</i>	Phytoplasma	Absent, no data	Grape vine	NO	Vineyards	<u>Economic impact</u>

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<i>dorée (FD)/ (Grapevine flavescence dorée)</i>						FD is on A2 EPPO list. Flavescence dorée phytoplasma first appeared in southwestern France in 1955. It was followed by its rapid expansion and appearance in Corsica, Italy and Spain (Catalonia), and then in Portugal and Switzerland. Recently, her appearance has been recorded in Serbia, Slovenia and Austria. Unfortunately, the first appearance of the FD was confirmed in 2009 and in Croatia. Grape vine was the only known FD phytoplasma until recently, but recently was found also in the <i>Clematis vitalba</i> near infected vineyards in Italy (Filippin et al., 2007). Recent studies have confirmed phytoplasma FD at black alder ( <i>Alnus glutinosa</i> ). For the moment more than <b>3.700 ha</b> of vineyards in BiH could be invaded with this pathogen if no control measures are taken.
<i>Tomato ringspot virus/ringspot of tomato (transmitted from Xiphinema americanum)</i>	Virus	Absent, no data	Fruits, Woody ornamental plants, Vegetables	NO	Plum orchards, raspberry, vineyards,	<u>Economic impact</u> TomRSV is on A2 EPPO list. The rapid spread of TomRSV in grapes in New York has led to a serious decline, particularly of the cultivar Cascade (Siebel 13053) (Uyemoto, 1975). In Oregon, fruit from TomRSV-infected raspberry canes weighed 21% less individually than from healthy canes, and the yield was more than halved, since TomRSV has a particularly adverse effect on drupelet set of certain cultivars (Daubeny et al., 1975; Freeman et al., 1975). In addition, fruit quality is reduced, the fruits being crumbly and therefore unmarketable (Mircetich, 1973). The progressive decline in raspberries is such that, by the third year of infection, up to 80% of fruiting canes may be killed. The virus is of some economic importance in those EPPO countries where it occurs. An isolate of TomRSV from Pelargonium in the UK (probably imported from the USA) caused severe symptoms on several glasshouse crops; thus, the virus presents a serious threat to the glasshouse industry, especially where salad and ornamental crops are grown together. It is possible that European Xiphinema species, such as <i>X. pachtaicum</i> , which is widespread in the EPPO region, could transmit the virus. This organism is very important for the BiH agricultural production and economy because: BiH has more than <b>2,500 hectares</b> planted with berry fruit (raspberries, strawberries, blueberries, blackberries and aronia) and it is increasing every year more.
<i>Diaporthe vaccinia Phomopsis canker and diebac</i>	Fungi	Absent, no data	Berry	NO	Blueberry orchards	<u>Economic impact</u> <i>D.vaccinii</i> is on A2 EPPO list. The disease is commonly established in the USA on cranberries and blueberries. It was responsible for a reduction of 18-35% of the cranberry crop in several plots in 1933 in Massachusetts (Bergman & Wilcox, 1936). The disease became serious in a few marshes in Wisconsin in 1966 and in isolated instances caused serious losses (Friend & Boone, 1968). Blueberries can be destroyed by <i>D. vaccinii</i> within a few months. There

						are reports of attendance in the area of Southeast Europe.
<i>Monilinia fructicola</i> Brown rot, twig canker	Fungi	Absent. No data	Fruit	No	Plum orchards	<p><u>Economic impact</u>  <i>Monilinia fructicola</i> is a devastating disease to peach orchards worldwide. Brown rot also affects other stone and pome fruit trees such as plum, apricot, cherry, apple and pear. The United States, a major producer of stone fruits, is at risk for potentially large yield losses each year due to brown rot. In areas of the world where it is present, <i>M. fructicola</i> is among the most economically important parasites of peach, nectarine, apricot, plum, cherry, and parasites on apples, pears and tomatoes. <i>Monilina fructicola</i> is an A2 quarantine organism for EPPO. <i>Monilina fructicola</i> causes severe losses, especially on stone fruits (<i>Prunus</i> spp.), both before and after harvest. Heavy losses have been reported in North America on peaches, cherries and plums. Losses of <b>1 million AUD</b> occurred on peaches in 1969 in the Murrumbidgee area (Australia), and heavy losses have also been reported on apricots in Tasmania. The main host range of this fungus covers the rosaceous fruit trees: principally peaches and other <i>Prunus</i> spp., to a lesser extent apples and pears; the fungus can also be found on <i>Chaenomeles</i>, <i>Crataegus</i>, <i>Cydonia</i> and <i>Eriobotrya</i>. The total area of peach and nectarine in BiH is <b>2000 hectares</b> (EPPO 2011). The organism is now present in Serbia and some articles says even in Croatia (Ivić et al., 2014). In August 2009, mature peaches (<i>Prunus persica</i> cv. Royal Glory) with brown rot were found in a 5-year-old orchard in Goriška, western Slovenia.</p>