

## Express PRA for *Aulacaspis tubercularis*

– Interception –

Prepared by: Julius Kühn-Institut, Institute for National and International Plant Health;  
on: 15/06/2018; by: Dr. Peter Baufeld, Dr. Anne Wilstermann; translated by Elke Vogt-Arndt

**Initiation:** Interception of Mangos by the Federal state North Rhine-Westphalia.

Express Pest Risk Analysis	<i>Aulacaspis tubercularis</i> Newstead		
Phytosanitary risk for Germany	high <input type="checkbox"/>	medium <input type="checkbox"/>	low <input checked="" type="checkbox"/>
Phytosanitary risk for EU MS	high <input type="checkbox"/>	medium <input type="checkbox"/>	low <input checked="" type="checkbox"/>
Certainty of assessment	high <input checked="" type="checkbox"/>	medium <input type="checkbox"/>	low <input type="checkbox"/>
<b>Conclusion</b>	<p>The thermophilic scale <i>Aulacaspis tubercularis</i> does not occur in Germany and so far, it is listed neither in the Annexes of Directive 2000/29/EC nor by EPPO.</p> <p><i>A. tubercularis</i> only occurs on Mango. Damage by feeding on leaves and fruits is known, but not in the infested areas of the EU.</p> <p>Due to inappropriate climatic conditions outdoors and lacking of the host plant Mango, the species is not capable to establish in Germany. The scale is already distributed in tropical and subtropical regions throughout the world.</p> <p><i>A. tubercularis</i> poses no phytosanitary risk for Germany and most EU Member States. <i>A. tubercularis</i> does already occur in a few climatically appropriate regions in Portugal, Spain and Italy, where the species causes no damage on Mango.</p> <p>For this reason, <i>A. tubercularis</i> is not classified as a quarantine pest and § 4a of the Plant Inspection Order does not apply.</p>		
<b>Preconditions for an Express PRA fulfilled?</b>	Yes, the scale could be a pest. <i>A. tubercularis</i> is not listed and is not established in the area covered by the reporting Plant Protection Service.		
<b>Taxonomy, common name, synonyms</b>	<p>Hemiptera, Coccoidea, Diaspididae (Deckelschildläuse), <i>Aulacaspis tubercularis</i> Newstead</p> <p>White mango scale, escama blanca del mango, mangodopluis, mango scale, Mangodeckelschildlaus</p> <p>Synonyms: <i>Diapis mangiferae</i> (Newstead), <i>Diaspis tubercularis</i> (Newstead)</p>		
<b>Does a relevant earlier PRA exist?</b>	Yes, the Ministry of Agriculture of the USA (USDA) prepared a risk analysis on the importation of Mangos from Pakistan into the USA (Continental) and identified a medium risk. In Florida,		

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	Mangos are cultivated on an area of 800 ha and the species already occurs in a few locations („Present, few occurrences“) (USDA, 2010).
<b>Distribution and biology</b>	The thermophilic White Mango Scale is already distributed in the tropical and subtropical regions worldwide (Asia, Oceania, Australia, Africa, Central America and the Caribbean, North America (Florida)). It is known to occur in Europe in Portugal (Madeira), Spain (Costa de Sol and Canary Islands) and Italy (CABI, 2018).
<b>Are host plants present in the PRA area? If so, which?</b>	There is a limited commercial production of Mango in Spain (several locations in Andalusia) and Italy (Sicily with 4 ha).
<b>Transfer from the consignment → host plant</b>	The infested Mango fruits must enter Mango plantings to render possible a transmission to Mango trees. The probability of the transmission via infested fruits is very low. Mango twigs resp. leaves are not traded. The main pathway of the pest are plants for planting.
<b>Is a vector/ further plant needed for host alternation? Which? Distribution?</b>	No.
<b>Climate in distribution area comparable to PRA area?</b>	<i>A. tubercularis</i> is thermophile and limited to tropical and subtropical regions.
<b>If no, are host plants present in protected cultivation?</b>	Not relevant.
<b>Expected damage in the PRA area</b>	Damage only occurs in regions where Mangos are cultivated. These cultivation areas are limited to a few locations in three EU Member States.  No information on damage to Mangos in the infested EU countries is available.
<b>Is an infestation easy to eradicate?</b>	Eradication measures are only promising in small, demarcated areas. Possible eradication measures were very demanding as scales on trees are very difficult to eradicate completely. The extraction and disposal of Mango trees in complete plantations would be very expensive and thus disproportionately.
<b>Remarks</b>	<i>A. tubercularis</i> is limited to Mangos and thus, limited to very small regions with a special climate in a few EU-Member States. So far, the occurrence is known in areas of three southern EU-Member States. No information on damage to Mangos in the infested EU countries is available.

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Literature	<p>CABI (2018): Invasive Species Compendium, Datasheet: <i>Aulacaspis tubercularis</i> (mango scale).  <a href="https://www.cabi.org/isc/datasheet/7988">https://www.cabi.org/isc/datasheet/7988</a></p> <p>USDA (2010): Importation of Fresh Mango Fruit (<i>Mangifera indica</i> L.) from Pakistan into the Continental United States. Risk Management Document, 8 S.</p>