

Express PRA for *Minthea rugicollis*

– Interception –

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Initiation: Interception in Brandenburg on packaging wood from India

Express PRA	<i>Minthea rugicollis</i> (Walker, 1858)		
Phytosanitary risk for Germany	high <input type="checkbox"/>	medium <input checked="" type="checkbox"/>	low <input type="checkbox"/>
Phytosanitary risk for EU-Member States	high <input type="checkbox"/>	medium <input checked="" type="checkbox"/>	low <input type="checkbox"/>
Certainty of assessment	high <input type="checkbox"/>	medium <input checked="" type="checkbox"/>	low <input type="checkbox"/>
Conclusion	<p><i>Minthea rugicollis</i> is endemic in South East Asia and was introduced to Australia, Europe, Papua New Guinea and South America. So far, it does not occur in Germany. In the EU, it is present in Portugal (2013) and possibly in Great Britain (1993, no subsequent notifications). So far, it is listed neither in the Annexes of Directive 2000/29/EC nor by EPPO. The beetle infests dry, starch-rich tropical deciduous trees.</p> <p>It is assumed that the beetle is not able to establish outdoors, due to unsuitable climatic conditions in Germany and other EU-Member States; but indoors (see presence in Portugal).</p> <p>The beetle infests only dry wood. Thus, it is a storage pest. Due to its damage potential for dry stored wood or wood in constructions, <i>M. rugicollis</i> presents a medium phytosanitary risk for Germany and other EU-Member States.</p> <p>Based on the risk analysis, it is assumed that the pest is able to establish in Germany or another Member State in the interior on built-in host wood or bamboo and in timber stores and to cause considerable damage. Thus, measures should be taken to prevent the introduction of this potential quarantine pest according to § 4a of the Plant Inspection Order and thus, the consignment has to be destroyed or to undergo a phytosanitary treatment.</p>		
Preconditions for Express PRA fulfilled?	<p>Yes, <i>Minthea rugicollis</i> could be a pest, the beetle is neither listed in the Annexes of Directive 2000/29/EC nor by EPPO and so far, it is not established in the area covered by the reporting Plant Protection Service.</p>		
Taxonomy, trivial name, synonyms	<p>Coleoptera, Lyctidae, Lyctinae, Lyctini</p> <p><i>Minthea rugicollis</i> (Walker, 1858)</p>		

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	Synonyms: <i>Ditoma rugicollis</i> Walker, 1858, <i>Eulachus hispida</i> Blackburn, 1885, <i>Minthea seriehispidus</i> Kiesenwetter, 1701 (Walker, 2005), <i>Lyctopholis rugicollis</i> Wlk. (CABI, 2018) Identification key: Sittichaya et al. (2009).
Does a relevant earlier PRA exist?	No
Distribution and biology	The beetle is endemic in South East Asia and was introduced to Australia, Great Britain (low prevalence, notification of 1993, EPPO PQR), Papua-New Guinea, Portugal (Baena and Zurzarte, 2013, indoors, not outdoors) and South America. The beetle species emerges in wood (tropical, some Australian species) and Bamboo. The introduction of other <i>Minthea</i> -species takes place with tropical wood also with ivory nuts and manioc roots (Weidner & Sellenschlo, 2010).
Are host plants present in the PRA area? If so, which?	Dry wood/sawn wood of imported tropical wood species as well as bamboo are present in Germany and the EU. The organism is described for tropical deciduous trees (e.g. <i>Artocarpus</i> , <i>Bombax</i> , <i>Dipterocarpus</i> , <i>Erythrina</i> (coral tree), <i>Garuga</i> , <i>Mangifera</i> , <i>Phyllanthus</i> , <i>Poinciana</i> , Walker, 2008). It is not clear to what extent it is able to infest also endemic or European wood species with a starch content of more than 3 %, e.g. in wood stores that do not underlie outdoor conditions. Coniferous wood is not infested (pine, fir, larch, spruce) (Walker, 2008).
Transfer pest consignment → host plant	The beetle preferably infests dry wood, thus, no transfer to living wood tissue. Wood of relevant host plants that is stored or used in construction in the interior can be infested.
Is a vector/further plant needed for host alternation? Which? Distribution?	No.
Climate in distribution area comparable to PRA area?	No, it is a tropical species.
If no, are host plants present in protected cultivation?	Dry wood, indoors.
Damage to be expected in the PRA area?	Possibly the beetle can cause considerable damage, as it bores into wooden material and bamboo. In the case of a massive infestation, it is possible that the wood/bamboo gets powdery

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	<p>to a depth of several centimetres (powder-post beetle). Damage by the powder-post beetle mostly becomes visible when using infested wood/bamboo in construction. Over time, the material is extremely processed by the beetles before the infestation becomes visible. The organism has been described on tropical deciduous wood and bamboo so that in the case of contact with this material an infestation and damage seems possible. It is not clear whether it is able to infest native wood species that do not underlie outdoor conditions.</p>
<p>Is an infestation easy to eradicate?</p>	<p>Shi & Tan (1987) describe the following procedures for the control of lyctids in the wood:</p> <ul style="list-style-type: none"> • Extraction of starch from the wood via storing in water for one year • Treatment with boron containing agents • Spraying with Permethrin • Fumigation with methyl bromide or sulfuryl fluoride • Heat treatment <p>Superficially applied insecticides are not effective as the organism does not get in contact with it.</p> <p>Valuable wood (e.g. works of art) that does not tolerate a chemical or thermic treatment can be treated with ionisation radiation.</p> <p>In general, infested objects in stores can easily be disinfected via heat treatments. However, even in small wood pieces numerous beetles may be present so that infested wood stores have to be cleansed intensively. Infestation outdoors in Germany or other EU-Member States has not to be expected.</p>
<p>Remarks</p>	<p>Only few information about the beetle is available.</p>
<p>Literature</p>	<p>CABI (2018): Basic Datasheet <i>Minthea rugicollis</i>, https://www.cabi.org/cpc/datasheet/34243, (accessed on: 29-06-2018)</p> <p>Walker, K. (2005): Hairy powderpost beetle (<i>Minthea rugicollis</i>). Revision on 21-07-2008 http://www.padil.gov.au/pests-and-diseases/pest/othersnames/135581 (page generated on: 29-06-2018)</p> <p>Walker, K. (2008): Exotic Plant Pest Factsheet. <i>Minthea rugicollis</i>. http://researchdata.museum.vic.gov.au/padil/fact_sheets/Minthea_rugicollis_EPP_Fact_Sheet.doc (accessed on: 29-06-2018)</p>

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	<p>Shi, Z.H.; Tan, S.Q. (1987): The susceptibility of Chinese hardwoods to powder post beetles attack and methods of control. <i>Scientia Silvae Sinicae</i>, 23 (1): 109-114.</p> <p>Sittichaya, W. B., Beaver, R. A., Liu, L.-Y., Ngampongsai, A. 2009 An illustrated key to powder post beetles (Coleoptera, Bostrichidae) associated with rubberwood in Thailand, with new records and a checklist of species found in southern Thailand. <i>Zookeys</i> 26: 33 – 51.</p> <p>Weidner, H.; Sellenschlo, U. (2010): <i>Vorratsschädlinge und Hausungeziefer</i>. 7. Aufl. Spektrum Akademischer Verlag Heidelberg: 337 S.</p>