Express-PRA for *Heterobostrychus pileatus* – Interception –

Prepared by: Julius Kühn-Institute, Institute for national and international Plant Health, Dr. Gritta Schrader; on: 28-05-2021. (translated by Elke Vogt-Arndt)

Initiation: Interception of packaging wooden material from Vietnam by the plant protection service of the Federal State Baden-Württemberg

Express-PRA	***Heterobostrychus pileatus* Lesne, 1899**		
Phytosanitary risk for Germany	**high** ☐	**medium** ☐	**low** ☒
Phytosanitary risk for EU-Member States	**high** ☐	**medium** ☐	**low** ☒
Certainty of the assessment	**high** ☐	**medium** ☒	**low** ☐
Conclusion	The beetle is endemic to Southeast Asia and does not yet occur in the EU. It has not yet been listed in the Annexes of Regulation (EU) 2019/2072 or by EPPO. *Heterobostrychus pileatus* infests various tropical and subtropical trees and wood. Due to unsuitable climatic conditions, it is assumed that the beetle cannot establish outdoors in Germany and Central Europe. The establishment in southern European Member States is unlikely, too. No significant damage is expected. Based on this risk analysis, *Heterobostrychus pileatus* is not classified as a quarantine pest and thus, Article 29 of the Regulation (EU) 2016/2031 does not apply. Nevertheless, for reasons of wood protection, the destruction of infested material as a precautionary measure or phytosanitary treatment is recommended to ensure that stored wood of respective host plant species is not infested or that the beetles do not continue to reproduce within the infested material and to destroy it. In the specific case of a detection in imported wooden packaging material, it must be considered that the presence of *H. pileatus* possibly can be traced back to an insufficient treatment according to ISPM No. 15, especially since the extent of the infestation was severe.		
Preconditions for Express-PRA fulfilled?	Yes, could be a pest, is not listed, neither in the Annexes of Regulation (EU) 2019/2072 nor by EPPO. To date, it is not established in the area covered by the reporting plant protection service or in the EU as a whole.		
Taxonomy, synonyms, common name	Coleoptera, Bostrichidae, *Heterobostrychus*, *Heterobostrychus pileatus* Lesne, 1899		

Express-PRA	*Heterobostrychus pileatus* Lesne, 1899
	Auger beetle See also identification key of Sittichaya et al. (2009). Photos of the beetle are available at Walker (2011).
EPPO Code	HETBPI
Does a relevant earlier PRA exist?	No.
Distribution and biology	Burma, India, Cambodia, Laos, Nepal, Philippines, Thailand, Vietnam (Beeson & Bhatia 1936, Liu und Beaver 2018, Borowski, 2021). According to Beeson and Bhatia (1936) *H. pileatus* is a forest associated species rather than a pest of wooden products, even though the beetle has been detected in the latter.
Are host plants present in the PRA-area? If so, which?	The known host plants are tropical resp. subtropical. *Heterobostrychus pileatus* infests *Acacia pennata, Cassia fistula, Dipterocarpus obtusifolius*, *Garuga pinnata, Hevea brasiliensis, Lannea grandis, Mallotus philippinensis, Mangifera indica, Pavetta indica, Santalum album, Shorea robusta, Sindora siamensis, Zizyphus* sp. (Beeson and Bhatia 1936, Australia Biosecurity, 2008, Sittichaya and Beaver, 2009, Beaver et al. 2011). They are present in the PRA area at most in greenhouses/tropical greenhouses.
Transfer pest consignment →host plant	In Germany and other EU Member States, at most a local transfer to stored wood is possible, if the wood of the host plants is stored at all, as it is predominantly tropical wood. Due to unsuitable climatic conditions, a transfer to living trees is not expected. Based on the finding of beetles in Australia on living mango trunks from India (Australia Biosecurity, 2008) there is a very low risk of transfer to living mango trees in tropical greenhouses.
Is a vector/further plant needed for host alternation? Which? Distribution?	No.
Climate in distribution area comparable to PRA-area?	No. It is a subtropical (monsoon forests) resp. tropical species.
If no, are host plants present in protected cultivation?	Isolated, in tropical greenhouses.
Damage to be expected in the PRA-area?	Phytosanitary damage is not expected. Since the beetle bores into wood material, it can cause damage in case that

Express-PRA	*Heterobostrychus pileatus* Lesne, 1899
	wood of host plants is stored. No information is available on the extent of damage. However, beneath the infested wooden packaging material a relatively large amount of bore dust was found so that significant damage on dry wood is assumed at least in case of severe infestation.
Is an infestation easy to eradicate?	Infested wooden packaging material can easily be destroyed.
Remarks	The severe infestation with *H. pileatus* of the wooden packaging material possibly indicates an insufficient treatment according to ISPM No. 15.
Literature	AUSTRALIA BIOSECURITY (2008): Provisional final import risk analysis report for fresh mango fruit from India. Biosecurity Australia, Canberra, 1-212. BEAVER, R. A., SITTICHAYA, W., LIU, L. Y. (2011): A review of the powder-post beetles of Thailand (Coleoptera: Bostrichidae). Tropical Natural History, 11 (2), 135-158. BEESON, C. F. C., BHATIA, B. M. (1936): On the biology of the Bostrychidae (Coleopt.). Indian Forest Records 2 (12): 231-320. BOROWSKI, T. (2021): World Inventory of Beetles of the Family Bostrichidae (Coleoptera). Part 2. Check List from 1758 to 2007. World News of Natural Sciences, 36, 9-41. LIU, L. Y., BEAVER, R. A. (2018): A synopsis of the powderpost beetles of the Himalayas with a key to the genera (Insecta: Coleoptera: Bostrichidae). Biodiversität und Naturausstattung im Himalaya VI; Hartmann, Barclay & Weipert: Erfurt, Deutschland, 407-422. SITTICHAYA, W., BEAVER, R. (2009): Rubberwood-destroying beetles in the eastern and gulf areas of Thailand (Coleoptera: Bostrichidae, Curculionidae: Scolytinae and Platypodinae). Songklanakarin Journal of Science & Technology, 31(4). WALKER, K. (2008): Auger beetle (*Heterobostrychus pileatus*). Australian Biosecurity. Online available under https://www.padil.gov.au/pests-and-iseases/pest/main/136001 (accessed on 27-05-2021).