Express-PRA for *Amphicerus anobioides* – Interception –

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Initiation: Interception in the Federal State Hamburg on wooden packaging material (consignment of natural stone) from India

Express-PRA	***Amphicerus anobioides* (Waterhouse)**		
Phytosanitary risk for Germany **Phytosanitary risk for EU-Member States**	Since the damage caused by *Amphicerus anobioides* is most probably limited to non-living plant parts, phytosanitary regulations do not apply for this pest. Thus, the categorisation of phytosanitary risk is not applicable. However, the beetle can cause damage in the field of material protection.		
Certainty of the assessment	**high** ☐	**medium** ☒	**low** ☐
Conclusion	The powder-post beetle *Amphicerus anobioides* is endemic to South East Asia and, according to current information, it is not present in Germany and the EU. It is not listed in the Annexes of Regulation (EU) 2019/2072 or by EPPO. *Amphicerus anobioides* infests tropical and subtropical starch-rich drywood of deciduous trees. Due to unsuitable climatic conditions and the lack of host plants, it is assumed that *A. anobioides* cannot establish outdoors in Germany. Establishment in southern European EU Member States is also not expected outdoors. *Amphicerus anobioides* has a medium to high damage potential for dry stored wood or wood in constructions. Since the damage is limited to non-living plant parts, *Amphicerus anobioides* is not classified as a potential quarantine pest. Thus, Article 29 of Regulation (EU) 2016/2031 does not apply. However, the user is recommended to destroy or decontaminate the infested material to avoid damage. In the specific case of the detection in imported wooden packaging material, it must be taken into account that the presence of *A. anobioides* possibly can be attributed to an insufficient treatment according to ISPM No. 15.		
Pre-conditions for Express-PRA fulfilled?	Yes, the beetle could be a pest, it is not listed and so far, it is not established in the area covered by the reporting plant protection service.		

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Taxonomy, synonyms, common name	Coleoptera, Bostrichidae, Bostrichinae, Bostrichini, *Amphicerus*, *Amphicerus anobioides* (Waterhouse) Synonyms: *Caenophrada anobioides* Waterhouse, 1888, *Schistoceros anobioides* (in some publications incorrectly „*anobiodes*“ is used)
EPPO Code	Only genus (1AMPIG) and *Amphicerus* sp. (AMPISP)
Does a relevant earlier PRA exist?	No.
Distribution and biology	India, Nepal, Myanmar, Laos, Sri Lanka, Thailand, Saudi Arabia, Yemen, Ethiopia, Eritrea (Beeson and Bhatia, 1937, Beaver et al. 2011, Liu und Beaver, 2018). The beetles bore into piles and the sapwood of tree trunks and wood of many host plants. Usually, the life cycle is annual but can last up to three years (Beeson and Bhatia, 1937).
Are host plants present in the PRA area? If so, which?	*Amphicerus anobioides* is polyphagous. The following host plants are mentioned: *Anogeissus latifolia, Anogeissus pendula, Bassia latifolia, Bombax malabaricum, Buchanania latifolia, Cedrela augustifolia, C. odorata, Dalbergia paniculata, Ficus hispida, Garuga pinnata, Holarrhena antidysenterica, Lannea grandis, Mallotus philippinensis, Mangifera indica, Shorea assamica, Shorea robusta, Psidium guajava, Tectona grandis, Toona ciliata* (Beeson and Bhatia, 1937, Beaver et al., 2011). These are tropical/subtropical plants. Most of them are not present in the PRA area. *Mangifera indica* and *Psidium guajava* are commercially cultivated to a low (Guave) to medium extent (Mango) in southern EU-Member States.
Transfer pest consignment →host plant	In Germany and Europe at most a local transfer to stored woods would be possible since the beetle very probably only infests dry wood. Nevertheless, the likelihood of an infestation is relatively low since the beetle needs higher temperatures. No transfer to living trees is expected.
Is a vector/further plant needed for host alternation? Which? Distribution?	No.
Climate in distribution area comparable to PRA area?	In Germany: no, it is a tropical to subtropical species.

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	In Europe: possibly in southern Europe (Mediterranean, subtropical climate).
If no, are host plants present in protected cultivation?	Not relevant, very probably the beetle does not infest living wood or trees.
Expected damage in PRA area?	No damage expected, not on living plants, since the establishment is very unlikely due to the climatic conditions and the lack of host plants. Very probably, only dead wood is infested. There is only one information from Thailand that the larvae and beetles live in deciduous forests and the larvae feed on twigs and the beetles on the leaves of their host plants (Royal Forest Department of Thailand, 2021). The source of this information is a web site of the Thai office for forest biodiversity. Relevant scientific information was not found. Damage could occur in case of storage of infested (tropical) wood in combination with non-infested wood, but presumably, the temperatures are not sufficient for this, at least in north and central Europe. In general, the beetle can cause significant damage because it bores into wooden material. In case of a massive infestation the wood can turn to powder several centimetres deep („powder post beetle"). Sen-Sarma (1977) indicates that the beetles (there named *Schistoceros anobiodes* instead of *Schistoceros anobioides*) along with *Heterobostrychus aequalis*, *Sinoxylon anale* and *S. crassum* belong to the most significant „powder-post beetles“.
Is an infestation easy to eradicate?	Very probably yes. If stored wood was infested it could be ruined. Since no massive spread has to be expected, the extent of ruined wood would be small.
Remarks	The uncertainty is estimated as low because so far, no information in respect to a phytosanitary risk (i.e. infestation and damage on living plants) is available. However, there is little information available on the beetle.
Literature	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. (1937): On the biology of the Bostrychidae (Coleoptera). Indian Forest Records (new series) Entomology 2: 223-323.

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SEN-SARMA, P. K. (1977): Insect pests and their control in rural housing. Indian journal of entomology. Vol.39 No.3, 284-288.

Fig. 1: *Amphicerus anobioides*, adult (Photo courtesy of © Dr. Olaf Zimmermann, Landwirtschaftliches Technologiezentrum (LTZ) Augustenberg)