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Interception of *Hololepta plana* (Sulzer) (Coleoptera, Histeridae) a rare beetle on poplar logs imported from Belgium

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Populus nigra Linnaeus (Salicaceae) commonly called as poplar is a raw material of splints used in the match industry. Poplar in the form of logs is being imported into India from Belgium and Germany to meet the huge demand for splints of the match industries located in Tamil Nadu, India. The imported logs are inspected and if found with live infestation/infection are treated as per the provisions of Plant Quarantine (Regulation of Import into India) Order, 2003 before release. routine During our plant quarantine inspections at Plant Quarantine Station, Tuticorin (Tamil Nadu, India), adult beetles of Hololepta plana (Sulzer) (Coleoptera: Histeridae) were intercepted on multiple occasions. The beetles were always associated with phoretic mesostigmatic mites. The beetles were 8-9 mm long, blackish, shiny, flat, with dorsoventrally sickle-shaped mandibles and antenna and tarsi variably red.

The adult phoretic mites, Lobogynioides andreinii (Berlese, 1910) (Acari: Mesostigamta: Diplogyniidae) were found on adults of *H. plana* and larvae of *Cucujus* sp. (Coleoptera: Cucujidae) and *Pyrochora* sp. (Coleoptera: Pyrochroidae)

under the bark of poplar. Adult mites exhibit kleptoparasitic behaviour consuming part of prey (Trach, 2013).

Between 2018-2020, a total of 500 consignments of poplar logs were imported from Belgium and 19 consignments were intercepted with *H. plana*. However, 40 consignments imported from Germany during the same period were found free of beetles (Table 1). *Hololepta plana* is reported for the first time on imported poplar logs from India and these were appropriately treated to prevent entry into the country.

Jan Bosselaers collected nine specimens of *H. plana* in Limburg, Belgium in 1984 and has reported it as a rare beetle. He has given distribution of the beetle within Belgium and reported it as occurring in Central Europe, Siberia and Transcaucasia, and not occurring in Germany.

The beetles were known to live under the bark of poplar trees along with other beetles namely *Agonum assimile* Paykull (Carabidae), *Thanasimus formicarius* L. (Cleridae), *Uleiota planata* (L.) and *Silvanus* unidentatus (F.) (Cucujidae), and the Spiders, Araneus unbraticus Clerck and Marpissa muscosa (Clerck) and fruiting bodies of the myxomycete *Perichaena corticalis* (Batsch) Rost.

Table 1: Details of imported consignments and interceptions of *H. plana*.

Country	Consignments imported (Number)	Quantity imported (MT)	Interception <i>H. plana</i> (Number of Consignments)
2018-19			
Belgium	260	61608	01
Germany	19	4178	00
2019-20			
Belgium	240	55711	18
Germany	21	4007	00



Fig. 1: Hololepta plana with phoretic mites

He reported them as carnivores. *Hololepta plana* was also found on the bark of *Quercus* sp. (Oak), *Pinus sylvestris* L. (Scots pine), *P. tremula* and *P. alba* (Jan Bosselaers, 1984; Anon, 2020). Allen and Hance (2009) first reported these beetles in United Kingdom in 2009. The species is now widespread in most of Europe (Maxwell, 2018).

Hololepta plana, carnivores are rare beetles harmless for agriculture and forestry. However, the import of natural enemies is covered under ISPM 3 and attracts Pest Risk Analysis for import of such organisms. In the present case, the beetles were also associated with phoretic mesostigmatic mites, which exhibits kleptoparsasitic behaviour and cannot be ignored from an import risk analysis point of view. Therefore, the imported consignments were fumigated with Methyl Bromide @ 48 g/m³ for 24 hours at NAP before the release of the consignments.

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References

Allen, A. J. and Hance, D. 2009. *Hololepta plana* (Sulzer, 1776) (Histeridae) in Norfolk-new to Britain. *The Coleopterist*, **18**: 153-154.

Anonymous. 2020. www.ukbeetles.co.uk.

Jan Bosselaers. 1984. *Hololepta plana* (Sulzer) in the north-east of Belgium (Coleptera, Hesteridae): 51-54

ISPM 3. 2005. Guidelines for the export, shipment, import and release of biological control agents and other

beneficial organisms, Rome, IPPC, FAO. Pp. 16.

Maxwell V. L. Barclay. 2018. *Hololepta plana* (Sulzer) (Histeridae) from Margravine Cemetery, West London. *The Coleopterist*, **27**(1): 27-28.

Trach, V. A. 2013. On the morphology, biology and distribution of *Lobogynioides andreinii* (Acari, Mesostigmata, Diplogyniidae), *Entomological Review*, **93**: 105-112.

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