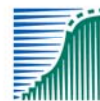


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PEST REPORT

Parmarion cf. martensi* – intercepted on *Dieffenbachia* potplant originating from Thailand*Introduction**

This report concerns the first official finding of the semi-slug *Parmarion cf. martensi* on import material in The Netherlands. The identification is performed morphologically on a single specimen.

Geographical distribution

Indigenous in Southeast-Asia, introduced in 1975 in Japan, in 1996 in Hawaii and in Samoa; invasive synantropical species in the tropics, which has established possibly elsewhere but may have not been identified due to identification difficulties. Reports of occurrence in greenhouses fail.

Pest status in the Netherlands

Absent

Host plant range

Polyphagous

Impact

A 2-years survey in Taiwan has revealed that slugs occur rather commonly in orchid gardens in central Taiwan. They damage primarily the leaves, flowers and roots of the orchid plants. The most common slug in these gardens was *P. martensi* (69% of a total of 603 slugs collected). Additionally, *P. martensi* is a vector of the nematode *Angiostrongylus cantonensis* (Chen, 1935), the causative agent of human angio-strongyliasis and the most common cause of human eosinophilic meningo-encephalitis.

Biology

Laboratory experiments in Taiwan showed the egg stage lasted 16.5, 14.1 and 12.2 days, respectively, at 20, 24 and 28 degreeC. Hatchability ranged between 75 to 96%. It took 66 to 86 days from hatching for the slug to laying eggs. Average life span was 84.2 to 150.2 days, with the longest of 271 days. As a hermaphrodite, eggs produced through cross-fertilization could give 95.6% hatchability while eggs produced through self-fertilization gave 90.8% hatchability. The number of eggs produced by each slug varied between 22 and 188 (Liu et al., 1997).

Detection/Identification

By moving, a slug secretes mucus, leaving a trail of mucus and slime behind it. Together with its large size, *P. martensi* is up to 50 mm long, detection is well possible in all kinds of products. Identification, however, is difficult and the accuracy of many records require further investigation (Hollingsworth et al., 2007). The species can only be distinguished with certainty from another widely introduced species, *P. pusillus*, by the relative lengths of the dart sac and the dart gland (Schilthuizen & Liew, 2008).

Pest significance

The plant damage potential of *P. martensi* does very likely not differ from these of most other slugs and semi-slugs, but it has synantropic preferences and is a vector of a human tropical disease.

Origin of the finding

On April 14, 2009, during import inspection of a consignment of *Dieffenbachia* pot plants (import Thailand) at Naaldwijk a slug was found (Leg. A. Emar, NAKtuinbouw). No other pests were found in the consignment.

Phytosanitary measures

No phytosanitary measures will be taken, as the risk of establishment of this semi-slug is extremely low.

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