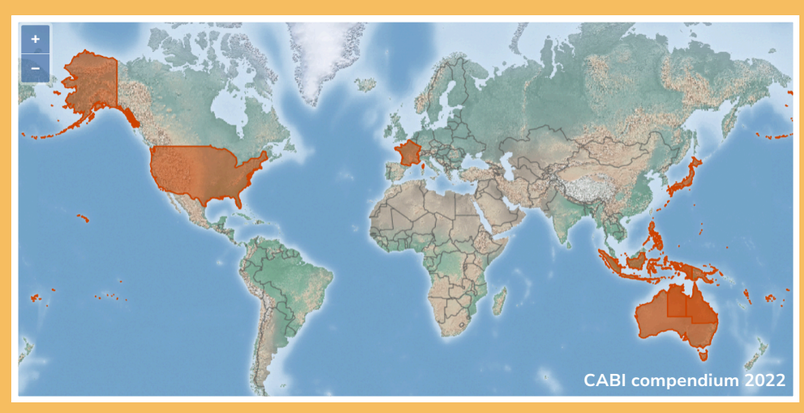
BE AWARE!

New Guinea flatworm - *Platydemus manokwari*

THE ORGANISM

Large predatory land flatworm native to New Guinea. It has become invasive in many countries worldwide across the Pacific, Southeast Asia, Caribbean, Europe and USA.



It is hermaphroditic and can reproduce through fragmentation. It lays cocoons containing 2-5 eggs, which hatch into juvenile works in 3 weeks and mature into adults capable of reproduction.

Adult | Egg cocoon | Juvenile worms

HOW TO RECOGNISE IT ?

1. APPEARANCE

The worm is flat, elongated, and measures 40-60mm (1.6-2.6 inches) long. Dark brown to black-olive upper side with a faint central stripe, and pale tan underside.

2. DISTINGUISHING FEATURE

Both ends of the worm look similar, but the head end is narrower and has two eyespots. Mouth located in the middle of the belly.

3. BEHAVIOUR

Active at night, it follows snail mucus trails, climbing trees to catch its prey.

4. HABITAT

Found in moist environments such as leaf litter, under rocks , timber, within the leaves, and in cavities of various plants.

THE PROBLEM

Botanic gardens and horticultural staff face significant challenges as cocoons, juveniles and adults can accidentally be transported together with live plant material and growing medium.

HEALTH RISK. DO NOT TOUCH with your bare hands. The organism can produce toxic chemicals and it is a host of rat lungworm (can cause a form of meningitis in humans and animals).

Invasive impact: Listed among the world's 100 worst invasive alien species. Poses significant ecological threats by altering food webs and damaging ecosystems. Prey on snails and other invertebrates leading to the decline of these important species.

Collection impact: Predatory activity can visibly damage plants and reduce overall plant health. Managing infestations require significant labour and financial investment due to the risks posed to biodiversity and human health.

WHAT TO DO?

PREVENTION

1. **Quarantine:** Implement strict quarantine measures to protect uninfested areas.
2. **Inspection:** Thoroughly check plants, soil, and plant products before introduction into collections.
3. **Planting practices:** Use soil-less compost / bare-rooted cuttings for new plants.

DETECTION & MANAGEMENT

1. **Monitoring:** Regularly monitor the movement of plants and soil for early infestation signs.
2. **Removal:** Carefully remove flatworms using gloves and disposable forceps when necessary.
3. **Disposal:** Properly dispose of infested plant material to prevent spread.
4. **Reporting:** Notify local agricultural or environmental authorities of any sightings.

For more information:

- Sugiura (2008) Platydemus manokwari (New guinea flatworm). CaBI Compendium, 42340
- Justine et al. (2014). The invasive New Guinea flatworm Platydemus manokwari in France, the first record for Europe: time for action is now. PeerJ 2:e297

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