



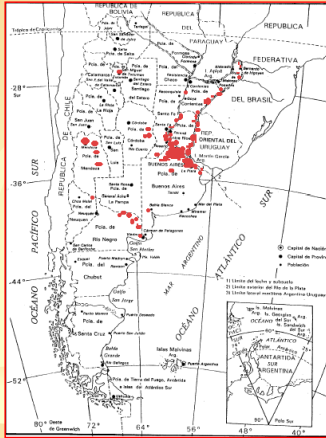
Risks of introduction of *Megaplatypus mutatus* from Argentina



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Introduction

M. mutatus is native of South America. Is especially prevalent in Argentina where has caused severe damage to *Populus sp.* It is a threat because:

- It have a high affinity with other tree species.
- A high adaptability to different climates regions.
- There are a lack of practices of prevention.
- The control practices are not common.
- very limited knowledge about natural control factors.
- The global climate change can affect his distribution.
- Lack of knowledge of his biology and the ambrosia fungus related.
- The increases of world commerce of wood products are also a major factor.



Life cycle and damages

This pest can't live in standing dead timber or dry sawed woods, only healthy trees are affected and only poplar trees shown stem breakage when storm of wind occur. Mortality (0.5%) due to broken poplars begins 2 years after its occurrence in the stand, and only if the poplars reach 15 years old.



risk of carrying this pest from Argentina.

Damage cycle

1. In spring a couple begins the attack and produce the **adult sawdust**, made by long particles on the edge of the hole.



2. The females place a large quantity of eggs in the gallery



3. Then, born the larvae. stages 1 and 2 eat ambrosia fungi, and then they continue doing the galleries.



6. In **October to December** of the next year the adults emerge by the same hole of entry made by the parents.



5. Pupae occurs in latest of winter or spring, in special chambers in the galleries.

4. Larvae make **sawdust** and the tree releases exsudates in summer, autumn and winter.

Transport

The flight capacity pest is not well known, but it is very improbable that adults may be introduced directly. This pest could be transported in plants for planting of host plants of more than 15 cm diameter, round wood (with or without bark), sawn wood, and wood packaging material from affected areas over long distances. The growing trades in large plants for landscaping and trade of large plants could represents a risk only from affected areas, but commerce of plants for planting is not usual from Latin America. The risk presented by sawn wood and packaging material it is supposed to be lower because the survival of larvae will be lower as wood humidity declines. Only round woods represents a

Discussion

Since it was detected in *Populus* and fruit trees in Italy (2000) additional hosts were recorded in after entry: *Juglans*, *Corylus*, and *Castanea*. The likelihood of establishment of this pest can be a threat. In 2006 Argentina and Italy had exchange wood products (more than 3.8 M ton.) including sawn-wood and saw-logs, and 70% are hard wood native species, but there are no records of *M. mutatus* can complete his life cycle in hard wood species. The international laws as NIMF/ISPM 15, are applied to commercial products, especially in highly commercial woods as Pine, Eucalyptus and Poplar, and only 7% of exportations from Argentina belong to non-native of broadleaf species.

Most of the insect's interception reports are incomplete at level of species, for example, unspecified *Platypus* spp. has been intercepted at ports of entry of USA, at least 46 times (1985-2004). Even if all of the *Platypus* or Platypodidae reported were *M. mutatus*, the arrival rate would still be low compared with other insect pests.

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