

Report of a Pest Risk Assessment

Pest: *Lygus lineolaris* (Palisot de Beauvois), the tarnished plant bug
PRA area: EPPO region
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Summary of Conclusions

The risk from this pest cannot be considered unacceptable, because of limited damage to host plants and restricted economic impact. The risks are similar to those posed by the common European *Lygus rugulipennis*, which is not considered a major pest (the pest is not listed as a quarantine pest for EPPO nor for the EU member states).

Status of the Pest

Mean comparative risk for entry, establishment and economic impact can be considered low. Therefore the pest could be considered for deletion from the alert list (i.e. one asterisk).

1. INITIATION

1.1 Reason for doing PRA: The pest is listed on the EPPO Alert List.

1.2. Taxonomic position of pest: Insecta, Heteroptera: Miridae.

2. PROBABILITY OF INTRODUCTION

2.1 Entry

2.1.1 Geographical distribution: Nearctic Region: distributed throughout North and Central America from Alaska to Honduras and El Salvador. No interceptions have been reported outside this region.

2.1.2 Major host plants: An extremely polyphagous species with potential host plants both in greenhouses and in open cultivation. More than 300 host plants from many families are listed.

2.1.3 Which pathway(s) is the pest likely to be introduced on: Consignments of plants for planting (mainly ornamentals and cut flowers) from North and Central America.

2.2 Establishment

2.2.1 Crops at risk in the PRA area: Damage to foliage and flower parts (e.g. flower buds) has been reported on more than 130 economically important host plants which are known to occur in the geographical distribution area. Most of these host plants are also cultivated in the PRA area.

- 2.2.2 Climatic similarity of present distribution with PRA area (or parts thereof):** The climate of the entire PRA area is similar to the present distribution area of the pest.
- 2.2.3 Aspects of the pest's biology that would favour establishment:** Adults fly frequently and there is more than one generation (2-5) per year. Adults can cover large distances by wind dispersal. Eggs overwinter in woody plant parts and are difficult to detect.
- 2.2.4 Characteristics (other than climatic) of the PRA area that would favour establishment:** There are many host plants throughout the PRA area, and ornamentals are transported throughout the PRA area and are imported from other areas where *Lygus lineolaris* is known to occur.
- 2.2.5 Which part of the PRA area is the endangered area:** All parts of the PRA area are threatened, because of the wide distribution of host species within the PRA area.

3. ECONOMIC IMPACT ASSESSMENT

- 3.1 Describe damage to potential hosts in PRA area:** Plants suffer from sucking damage to leaves and flower parts (mainly flower buds). There are no reports of plant losses.
- 3.2 How much economic impact does the pest have in its present distribution:** Within crops and nurseries, reported damage is limited. Economic impact to specific crops is restricted because of the highly polyphagous nature of the pest. Incidental damage has been reported from more than 130 economically important plant species.
- 3.3 How much economic impact would the pest have in the PRA area:** The anticipated economic impact is similar to those caused by the related Palaearctic species *Lygus rugulipennis* Poppius which cannot be considered a major pest. *Lygus rugulipennis* Poppius not a quarantine pest for EPPO nor for the EU member states.

4. CONCLUSIONS OF PRA

- 4.1 Summarize the major factors that influence the acceptability of the risk from this pest:** The risk from this pest cannot be considered unacceptable because of limited anticipated economic impact. The risks are similar to those posed by the common European *Lygus rugulipennis*, which is not considered a major pest (the pest is not listed as a quarantine pest for EPPO nor for the EU member states).
- 4.2 Estimate the probability of entry:**
- 4.3 Estimate the probability of establishment:**
- 4.4 Estimate the potential economic impact:** The economic impact will be similar to those of *Lygus rugulipennis*, which is not listed as a quarantine pest, and can be considered of minor importance..

4.5 Degree of uncertainty

5. OVERALL CONCLUSIONS OF THE ASSESSOR

Sources

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