

This short description was prepared in the framework of the EU FP7 project DROPSA - Strategies to develop effective, innovative and practical approaches to protect major European fruit crops from pests and pathogens (grant agreement no. 613678). This pest was listed in the DROPSA alert list for apple fruit.

**Lygus lineolaris (Heteroptera: Miridae)**

**Fruit pathway:** eggs may be laid on fruit, nymphs and adults suck plant juice from fruit (Biosecurity New Zealand 2009)

**Other pathways:** plants for planting; eggs are also laid on stems, leaves and flowers, nymphs and adults also suck plant juice from buds, flowers and leaves (CABI CPC)

**Hosts:** Highly polyphagous, hosts include *Malus*, *Fragaria ananassa*, *Prunus*, *Pyrus*, *Rubus*, *Phaseolus*, *Solanum tuberosum*, *Zea mays* (CABI CPC)

**Distribution:** North America: USA, Canada, Mexico; Central America and Caribbean: Bermuda, El Salvador, Guatemala, Honduras (EPPO GD)

**Damage:** one of the key pests in Quebec apple orchards, may damage 30 % of apple buds in orchards (Michaud *et al.* 1990). Feeding on buds and new growth can cause yellowing and distortion of growing points. Feeding upon immature fruits can cause abscission of the fruiting body ('blasting'). Apples, peaches and other fruits can develop dimpling (catfacing) around the feeding sites (CPC). Damage has also been recorded in other crops, such as cucumber, blackberry, raspberry, grape, pepper, pear (EPPO 2015). *L. lineolaris* is regarded as most important pest of grain amaranth in North America (Wheeler 2001)

**Other information:** Was formerly present on the EPPO Alert list (1998-2008). A PRA was performed in 2000 (EPPO 2002) and concluded that the risk was not unacceptable (limited damage and restricted economic impact). However, there is still evidence of damage in the literature and this species was retained here. Quarantine pest for Israel 2009, Brazil 1995, Costa Rica 2012, Ecuador 2008, Japan 2011 (EPPO 2015). Biosecurity New Zealand requires risk mitigation measures for *L. lineolaris* for apple and other fruits from USA (Biosecurity New Zealand 2009).

<b>Impact:</b> High (in the past)	<b>Intercepted:</b> Not known	<b>Spreading/invasive:</b> Not known
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**References:**

- Biosecurity New Zealand 2009. Import Risk Analysis: Fresh stonefruit from Idaho, Oregon and Washington. Draft for public consultation. MAF Biosecurity New Zealand.
- CABI CPC. Crop Protection Compendium. CAB International, UK. URL: <http://www.cabi.org/cpc>
- EPPO GD. EPPO Global Database, European and Mediterranean Plant Protection Organization, France. URL: <https://gd.eppo.int>
- EPPO 2002. Report of a Pest Risk Assessment: *Lygus lineolaris* (Palisot de Beauvois), the tarnished plant bug.
- EPPO 2015. EPPO Technical Document No. 1068: EPPO Study on Pest Risks Associated with the Import of Tomato Fruit. European and Mediterranean Plant Protection Organization, Paris, France, 182 p.
- Michaud OD, Stewart RK, Boivin G 1990. Susceptibility of apples to damage by *Lygocoris communis* and *Lygus lineolaris* (Hemiptera: Miridae).
- Wheeler AG 2001. Biology of the plant bugs (Hemiptera: Miridae): pests, predators, opportunists. Cornell University Press, Ithaca, USA, 507 p.