

## *Dindymus versicolor* (Hemiptera: Pyrrhocoridae)

This short description has been prepared in the framework of the EPPO Study on Pest Risks Associated with the Import of Tomato Fruit. The whole study can be retrieved from the EPPO website.

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Africa	Asia	Oceania	North America	South-Central America and Caribbean
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### ***Dindymus versicolor* (Hemiptera: Pyrrhocoridae) (harlequin bug)**

Why	Identified in the EPPO tomato study.
Where	<p><b>EPPO region:</b> absent</p> <p><b>Oceania:</b> Australia, New Zealand (Cassis and Gross, 2002).  <i>For Australia:</i> New South Wales (south-east coast), South Australia (south gulf, south-east coast), Tasmania, Victoria (south-east coast), Western Australia (Queensland Government, 2000)  <i>For New Zealand:</i> the record is uncertain. No other reference was found, and the pest is regulated on capsicum and tomato from Australia (Biosecurity NZ, 2000 &amp; 2013) (i.e. it should be absent or under official control).</p>
Climatic similarity	Medium. 8 similar climates for Australia, but probably only 5 considering the distribution within Australia.
On which plants	The only specific reference found to tomato is that it is regulated on tomatoes from Australia to New Zealand (Biosecurity NZ, 2000 & 2013). <i>D. versicolor</i> attacks a wide range of crops, such as cotton, pome fruits, stone fruits, fig, grape, kurrajong, strawberry, vegetables, wisteria, dahlia and violet (Fletcher, 2007), artichoke, fig, strawberry, sunflower, apple, almond, apricot, peach, pear, gooseberry, black currant, raspberry, potato, grape (Cassis and Gross, 2002), abutilon, alyogone, dahlia, fig, grape, hibiscus, kurrajong, pome and stone fruit, strawberry, Thomasia, violet, wisteria (Queensland Government 2000).
Damage	<i>D. versicolor</i> feeds on leaves and fruit. Feeding in swarms causes wilting and fruit damage (Queensland Government, 2000; Fletcher, 2007). It was considered as a pest of soft fruit orchards and gardens (Stahle, 1979). <i>D. versicolor</i> is reported as a key pest in Victoria, and a minor pest in Western Australia (about ornamentals, Queensland Government, 2000).
Dissemination	No details were found, but adults fly. One recommendation for control is to avoid spreading the pest with infested material (Fletcher, 2007)
Pathway	Plants for planting, fruits, vegetables, cut flowers of host plants from countries where <i>D. versicolor</i> occurs.
Possible risks	This pest has a wide host range, and may attack tomato among all its vegetable hosts. Several hosts are major crops in the EPPO region. The climatic similarity according to the EPPO Study between the area where it occurs and the EPPO region is medium.
Categorization	Quarantine pest for New Zealand (peppers and tomato from Australia, Biosecurity NZ 2000 & 2013), Korea Rep 2011 (from IPP).
Sources	<p>Biosecurity NZ. 2000. Import Health Standard Commodity Sub-class: Fresh Fruit/Vegetables Tomato, <i>Lycopersicon esculentum</i> from Australia. Issued pursuant to Section 22 of the Biosecurity Act 1993. Date Issued: 9 June 2000.</p> <p>Biosecurity NZ. 2013. Draft For Public Consultation May 2013. Risk Management Proposal Alternatives to dimethoate to manage the export of fruit fly host commodities: Irradiation of fresh <i>Capsicum annum</i> L. (<i>capsicum</i>) and <i>Lycopersicon esculentum</i> L. (tomato) for human consumption from Australia to New Zealand <a href="http://www.biosecurity.govt.nz/files/biosec/consult/rmp-irradiation-of-fresh-capsicum-and-tomatoes.pdf">http://www.biosecurity.govt.nz/files/biosec/consult/rmp-irradiation-of-fresh-capsicum-and-tomatoes.pdf</a> (Accessed August 2013)</p> <p>Cassis G, Gross GF. 2002. Hemiptera. Csiro Publishing, 2002 - 737 pp. <a href="http://books.google.dk/books?id=UWlfn5wT6D8C&amp;pg=PA110&amp;lpq=PA110&amp;dq=Fabriciellus+australis&amp;source=bl&amp;ots=NO251icBHe&amp;sig=yDjmcTNk7Me0BUHFHa-6MKsXgus&amp;hl=en&amp;sa=X&amp;ei=rC24UbjqHs6z0QXPqoC4AQ&amp;ved=0CE0Q6AEwBw#v=onepage&amp;q=packausk as&amp;f=false">http://books.google.dk/books?id=UWlfn5wT6D8C&amp;pg=PA110&amp;lpq=PA110&amp;dq=Fabriciellus+australis&amp;source=bl&amp;ots=NO251icBHe&amp;sig=yDjmcTNk7Me0BUHFHa-6MKsXgus&amp;hl=en&amp;sa=X&amp;ei=rC24UbjqHs6z0QXPqoC4AQ&amp;ved=0CE0Q6AEwBw#v=onepage&amp;q=packausk as&amp;f=false</a> (Accessed December 2013)</p> <p>Fletcher M. 2007. Plant bugs. PRIMEFACT 508, State of New South Wales through NSW Department of Primary Industries. <a href="http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0005/142808/plant-bugs.pdf">http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0005/142808/plant-bugs.pdf</a> (Accessed August 2013) IPP)</p> <p>Quarantine list for Korea Rep 2011 (from the IPP)</p>

Queensland Government. 2000. Integrated pest management in ornamentals. Information Kit. Queensland Government. <http://era.deedi.qld.gov.au/2208/6/005-ipm.pdf> (Accessed August 2013)

Stahle PP. 1979. The immature stages of the harlequin bug, *Dindymus versicolor*. J. Aust. ent. Soc. 18: 271-276  
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