

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 orange and mandarin fruit.

***Praelongorthezia praelonga* (Hemiptera: Ortheziidae)**

Location of life stages on plant parts: Most publications mention leaves (USDA, 2015; CU Lassallista, 2012), also branches, flowers and trunks in high populations (Kondo et al., 2013). In addition, its spread mechanism may favour association with the fruit (see Other information). The association with fruit is considered uncertain.

Fruit pathway: yes, not mobile, with an uncertainty.

Other pathways: plants for planting, cut flowers and branches.

Hosts: Hosts in 32 families (Malumphy, 2014), including *Citrus*, *Citrus sinensis*, *Coffea*, *Malpighia glabra*, *Solanum melongena* (CABI CPC), *Citrus reticulata*, *Mangifera*, *Cocos nucifera*, *Lonicera*, *Curcubita pepo*, *Gossypium*, *Hibiscus*, *Carica*, *Saccharum*, *Rosa*, *Coffea*, *Fortunella*, *Capsicum*, *Theobroma cacao* (García Morales et al., 2016).

Distribution: Caribbean: Antigua and Barbuda, Barbados, Curaçao, Dominica, Grenada, Jamaica, Montserrat, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Trinidad and Tobago (CABI CPC), British Virgin Islands, Puerto Rico, Saint Croix, US Virgin Islands (García Morales et al., 2016 onwards), UK Virgin Islands, Guadeloupe; Martinique; (Kondo et al., 2013); South America: Brazil, Guyana, Suriname (CABI CPC), Argentina, Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Venezuela (García Morales et al., 2016); North America: USA (Virginia) (USDA, 2012), Mexico (García Morales et al., 2016); Central America (Kondo et al., 2013): Panama (García Morales et al., 2016). Africa: Congo Dem. Rep. (Kondo et al., 2013), Congo (Mbete et al., 2011); Reunion (García Morales et al., 2016). Introduced into Afrotropical region in the early 2000s (Kondo et al., 2013).

Damage: On Citrus, *P. praelonga* causes defoliation, weakening of trees, fruit drop over 50%, fruit that remain acid and with a low sugar content, and in severe cases the fruits are smaller and cannot be sold; the pest also favours the development of sooty moulds (Fundecitrus, no date). In Brazil, it is the main soft scale on Citrus (Schinor et al., 2011). On acerola (*Malpighia*), it causes severe damage and death of plants (Rabelo Barbosa et al., 2007). In Argentina, it is reported to also affect fruit (Spanish NPPO). Damage on other hosts was not looked at.

Other information: In severe attacks, the pest may occur on plants under the host tree. It spreads readily through orchards with harvesting material, clothes, people, vehicles, wind, spray jet; it is important to make inspections before harvesting and spraying (Fundecitrus, no date). Kondo et al. (2013) mentions that healthy fruit should be picked before infested ones to avoid spreading the pest (within orchards). *P. praelonga* has been intercepted in the USA on *Cajanus*, *Croton*, *Kalanchoe*, *Mentha*, *Rosmarinus* (Evans and Dooley, 2013). Proposed in answer to EPPO questionnaire on pests of concern for Citrus.

Recorded impact: High	Intercepted: Yes	Spreading/invasive: Yes
------------------------------	-------------------------	--------------------------------

References:

- CABI CPC. Crop Protection Compendium. CAB International, UK. <http://www.cabi.org/cpc>
- CU Lasallista. 2012. Citricos: cultivo, poscosecha e industrializacion. Caldas: Corporacion Universitaria Lasallista, 2012. 367 p.; il. (Serie Lasallista Investigacion y Ciencia).
- Evans GA, Dooley JW. 2003. Potential Invasive Species of Scale Insects for the USA and Caribbean Basin. Chapter 18 In Potential Invasive Pests of Agricultural Crops (ed. J. Peña). CAB International
- Fundecitrus. no date. Ortézia. <http://www.fundecitrus.com.br/doencas/ortezia/23>
- García Morales M, Denno BD, Miller DR, Miller GL, Ben-Dov Y, Hardy NB. 2016. ScaleNet: A literature-based model of scale insect biology and systematics. Database. doi: 10.1093/database/bav118. <http://scalenet.info>.

- Kondo T, Peronti A, Kozár F, Szita E. 2013. The Citrus *Orthezia Praelongorthezia praelonga*, a Potential Invasive Species Chapter 17 In Potential Invasive Pests of Agricultural Crops (ed. J. Peña). CAB International
- Malumphy C. 2014. An annotated checklist of scale insects (Hemiptera: Coccoidea) of Saint Lucia, Lesser Antilles. *Zootaxa* 3846 (1): 069–086
- Mbete P, Itoua-Apoyolo CM, Kiyindou A, Ngokaka C, N'Doungou J-P. 2011. Evaluation des dégâts causés aux Agrumes par la cochenille (*Praelongorthezia praelonga*) dans les quartiers Sud de la ville de Brazzaville. *Journal of Applied Biosciences* 39: 2619 – 2625
- Rabelo Barbosa F, Gonzaga Neto L, de Lima Carvalho GK, da Silva Carvalho R. Manejo e Controle da Cochonilha Ortézia (*Orthezia praelonga*), em Plantios Irrigados de Acerola, no Submédio São Francisco. Circular tecnica 83. Petrolina, PE. Dezembro, 2007
- Schinor EH, Bortolato Martelli I, de Andrade Pacheco C, de Azevedo FA. 2011. Eficiência de inseticidas no controle de *Praelongorthezia praelonga* em laranja doce. *Citrus Research & Technology, Cordeirópolis*, v.32, n.2, p.93-102, 2011
- USDA. 2012. Pest List for the Importation of Fresh Commercial Citrus Fruit: Grapefruit (*Citrus × paradisi*); Lime (*C. aurantiifolia*); Mandarin Orange, Tangerine, or Hybrids (*C. reticulata*); Sweet Orange (*C. sinensis*); and Tangelo (*C. × tangelo*) from Peru into the Continental United States. Version 1.
- USDA. 2015. Risk Assessment for the Importation of Fresh Lemon (*Citrus limon* (L.) Burm. f.) Fruit from Northwest Argentina into the Continental United States