

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.

**Paracoccus burnerae (Hemiptera: Pseudococcidae)**

**Location of life stages on plant parts:** branches, leaves, fruit (Johnson, 2010).

**Fruit pathway:** yes, not mobile.

**Other pathways:** plants for planting, cut plant part (e.g. asparagus).

Uncertain pathways: cut flowers.

**Hosts:** Polyphagous, incl. *Citrus sinensis* (CABI CPC), *Citrus aurantium*, *Nerium oleander*, *Asparagus*, *Gossypium*, *Hibiscus*, *Musa ensete*, *Psidium guajava*, *Olea europaea*, *Passiflora edulis*, *Coffea arabica*, *Polysphaeria multiflora*, *Solanum tuberosum* (Garcia Morales et al., 2016).

**Distribution:** Africa: Angola, Ascension Island, Comoros, Kenya, Namibia, Reunion, Saint Helena, Seychelles, South Africa, Zambia, Zimbabwe; Asia: India, Iran (Garcia Morales et al., 2016), Yemen (Marotta et al., 2001). The pest has spread within Africa (Johnson, 2010). Absent, intercepted only: UK; CABI CPC mentions the UK (unconfirmed record from datamining); however, the abstract concerned mentions interception of *P. burnerae* on oranges from South Africa (Malumphy, 1993). The pest is considered absent from the EU.

**Damage:** Data on impact was found for South Africa. *P. burnerae* is mentioned amongst the three most important citrus mealybug in South Africa (Garcia Morales et al., 2016, citing others Hattingh, 1993; Johnson & Giliomee, 2010). It became more prevalent during the early 1990s, and is outcompeting *Planococcus citri* in some parts of South Africa (Johnson, 2010). It is a serious pest of citrus, but is also a quarantine pest for citrus fruit imported from South Africa, affecting exports of Citrus fruits (Johnson and Gillomee, 2012; Acton, 2013).

**Other information:** *P. burnerae* is a vector of banana streak virus (Muturi et al., 2013). It has been intercepted in France on Citrus fruits (Plant Health Laboratory LSV, ANSES, France), in the UK on oranges (Malumphy, 1993). It has also been intercepted in the USA from several countries, mostly on *Citrus*, also *Nephelium* and *Pyrus* (Miller et al., 2014; Evans and Dooley, 2013). Proposed in answer to the EPPO questionnaire on pests of concern for Citrus.

<b>Recorded impact:</b> High (also vector)	<b>Intercepted:</b> Yes	<b>Spreading/invasive:</b> Yes
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**References:**

- Acton QA (ed). 2013. University of Stellenbosch Mattieland. Seasonal phenology and natural enemies of the oleander mealybug, *Paracoccus burnerae* (Brain) (Hemiptera; Pseudococcidae), in South Africa. In: Issues in Life Sciences—Acarology, Arachnology, and Entomology: 2013 Edition. ScholarlyEditions, 1 mai 2013 - 1189 pages
- CABI CPC. Crop Protection Compendium. CAB International, UK. <http://www.cabi.org/cpc>
- 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
- 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>.
- Johnson T, Giliomee JH. 2012. Seasonal phenology and natural enemies of the oleander mealybug, *Paracoccus burnerae* (Brain) (Hemiptera: Pseudococcidae), in South Africa. African Entomology; 2012. 20(1):17.
- Johnson T. 2010. Biology of the Oleander Mealybug, *Paracoccus Burnerae* (Brain) (Hemiptera: Pseudococcidae). MSc thesis. University of Stellenbosch, South Africa.

- Malumphy C. 2003. First interceptions of *Paracoccus burnerae* (Brain) (Homoptera: Pseudococcidae) in Britain. *Entomologist's Gazette*; 1993. 44(4):303-305. (abstract).
- Marotta S, Harten A van, Mahyoub MA. 2001. Mealybugs found on agricultural crops in Yemen. Proceedings of the ISSIS IX International Symposium on Scale Insect Studies, Padua, Italy, 28 September 2001. *Bollettino di Zoologia Agraria e di Bachicoltura*; 2001. 33(3):233-238. (abstract)
- Miller D, Rung A, Parikh G, Venable G, Redford AJ, Evans GA, Gill RJ. 2014. *Scale Insects, Edition 2*. USDA APHIS Identification Technology Program (ITP). Fort Collins, CO.  
<http://idtools.org/id/scales/factsheet.php?name=7037>
- Muturi SM, Wachira FN, Karanja LS, Wambulwa MC, Macharia E. 2013. *Paracoccus burnerae* (Homoptera; Planococcidae) as a vector of Banana streak virus. *Journal of Experimental Biology and Agricultural Sciences*, November - 2013; Volume – 1(5).