

Pest Fact Sheet

Introduction: *Carpophilus truncatus* is a pest of stored products including nuts. Unlike other *Carpophilus* species, it also feeds on nuts on trees in orchards and therefore represents a significant threat to Californian tree nut production. In the fall of 2023 it was detected in the San Joaquin Valley (King, Madera, Merced, and Stanislaus Counties), and detected in Tulare County in 2025.

Distribution: This species has an almost global distribution in tropical and subtropical areas with dry and Mediterranean climates in the Americas, Europe, Africa, Asia and Australia.

Description: Adult *C. truncatus* are brown, somewhat flattened beetles 2.5 to 3.0 mm in length with shortened elytra, leaving terminal segments of abdomen exposed. They are very similar to several other *Carpophilus* beetles, especially the widespread and common *C. dimidiatus*. Larvae are elongate (up to 6 mm) with a sclerotized head and characteristic dark spines on the end of abdomen.

Biology: Adult beetles move into nuts around hull split, both on the trees and on the ground, apparently being able to infest only split nuts. Females oviposit on the nut and the larvae feed on the kernel, leaving behind tunnels and a powdery mix of nut debris and frass, eventually pupating inside the nut. Emerging adults overwinter in the nuts left in orchards post harvest (a.k.a. 'mummy' nuts), to attack the new harvest the following year.

Economic importance: Before detection in nut groves in Australia, Argentina, Italy and California, *C. truncatus* was considered only a minor pest of stored products. It is known to develop primarily on almonds, but is also reported from pistachios and walnuts. Data from Australia, where the beetles have long been established as a primary pest of almond, the average nut damage is 2 to 5%, but can reach up to 30%. *Carpophilus truncatus* appears to be established over a large area in California, and thus poses a significant economic threat to the Californian tree-nut industry, especially almonds.

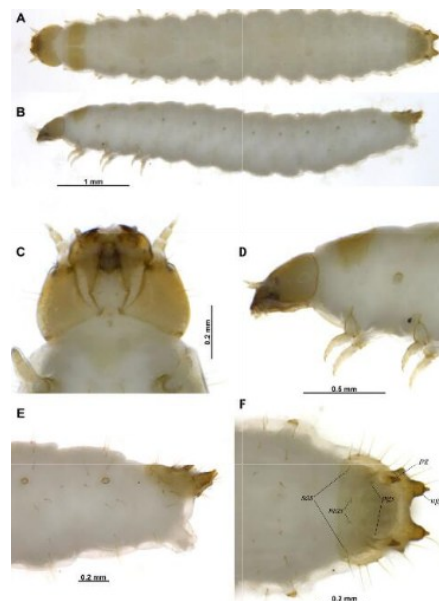
References:

Hossain, M. S. (2018). Management of *Carpophilus* beetles in almonds. Hort Innovation Australia Limited, Sydney, Australia. 93 pp.

Semeraro, L., Blacket, M. J., Raco, L., & Cunningham, J. P. (2023). The pest sap beetle *Carpophilus (Myothorax) truncatus* Murray, 1864 (Coleoptera, Nitidulidae) - a new synonymy and a related new species of *Carpophilus*. *Zootaxa*, 5301, 51-74.



Carpophilus truncatus adult.



Carpophilus truncatus larva (Semeraro et al. 2023).



Almond nut infested with *Carpophilus truncatus* (H. Wilson).