

Shallot Spodoptera army worm (178)

Summary

- Worldwide distribution. Not recorded in Oceania. On shallot, onion and relatives, food legumes, and potato and cabbage families. Usually, a minor pest in Pacific islands.
- Young caterpillars scrape the surface of outside leaves; larger ones make holes and eat all the leaves.
- Eggs hatch and larvae stay together at first then fan out until there is only one per plant. They pupate in the soil, producing a moth that is a strong flyer.
- Cultural control: handpick; grow under nets; mass trapping using lights; weed; 1-2-year crop rotations.
- Chemical control: PDPs: chillies, neem, pyrethrum, or derris; or, if grown for sale, Bt (*Bacillus thuringiensis*) on young caterpillars.

Common Name

The species damaging to shallot in Pacific island countries has not been identified. In this fact sheet, it is assumed to be either *Spodoptera exigua* (common cutworm, beet armyworm, small mottled willow moth), or *Spodoptera litura* (taro cluster caterpillar) (see **Fact Sheet no. 31**).

Scientific Name

Spodoptera exigua (or *Spodoptera litura*). Confirmation required.



Photo 1. Caterpillar damage on onion leaves caused by *Spodoptera* sp. Often the caterpillars are found inside the tubular leaves.



Photo 2. *Spodoptera litura* caterpillar on banana.



Photo 4. Adult, *Spodoptera litura*.



Photo 5. Adult, *Spodoptera exigua*.



Photo 3. *Spodoptera exigua*, caterpillar.

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Information for *Spodoptera litura*: from Carmichael A, et al. (2008) TaroPest: an illustrated guide to pests and diseases of taro in the South Pacific. ACIAR Monograph No. 132, 76 pp. (<https://trd.spc.int/about-ird/ird-project-partners/taropest/>) and from Carmichael A (2008) Cluster Caterpillar (*Spodoptera litura*). PaDIL - <http://www.padil.gov.au>. Information on *Spodoptera exigua*: from MAF Plant Health & Environment Laboratory (2011) Beet armyworm (*Spodoptera exigua*). PaDIL - <http://www.padil.gov.au>; and Capinera JL (2020) Beet armyworm. Featured Creatures. UF/IFAS. University of Florida. (http://entnemdept.ufl.edu/creatures/veg/leaf/beet_armyworm.htm); and *Spodoptera exigua* (Hubner, 1808) (undated) Atlas of Living Australia. (<https://bie.ala.org.au/species/urn:lsid:biodiversity.org.au:afd:taxon:35e15238-b120-49e9-a3d7-0bd177c3afad>); and from Basuki SR (2011) Farmers' knowledge and effectiveness of insecticide uses by farmers in controlling *Spodoptera exigua* on shallots in Brebes and Cirebon. Indonesian Journal of Agriculture 4(1): 22-32. (<https://ei-ado.aciar.gov.au/supplementary-reports/annotated-bibliography/farmers-knowledge-and-effectiveness-insecticide-uses.html>). Photo 1 Ooi P (Image ID 38351). Photo 3 Frank Peairs, Colorado State University, Bugwood.org. Photo 5 Robert J. Bauernfeind, Kansas State University, Bugwood.org.

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