

Lettuce soft rot (289)

Summary

- Worldwide distribution. A soil bacterium; common on cabbage, celery, carrot, Chinese cabbage, potato, and more.
- Infection via wounds at planting/harvest, and by insects.
- Large brown slimy areas on outer leaves, affecting the 'head' and stem, causing wilts and soft rots in field in wet, warm weather. Rots occur in transit and storage.
- Spread by rain splash, knives and insects.
- Cultural control: raised beds to improve drainage; straw/grass mulch; space plants; care when weeding; remove diseased plants; disinfect (bleach) knives used for trimming plants at harvest; avoid harvesting when wet; store at 4°C; collect, burn/bury debris; 2-3-year crop rotation.
- Chemical control: none recommended.

Common Name

Lettuce soft rot, bacterial soft rot

Scientific Name

Pectobacterium carotovorum subsp. *carotovorum* (previously, *Erwinia carotovora* pv. *carotovora*, *Erwinia carotovora* subsp. *carotovora*, and also *Erwinia aroideae*). Other bacteria species may also be present in the soft rots.

AUTHOR Grahame Jackson

Information from *Diseases of vegetable crops in Australia* (2010), Editors, Denis Persley, et al. CSIRO Publishing. CABI (2019) *Pectobacterium carotovorum* subsp. *carotovorum* (bacterial root rot of sweet potato).

(<https://www.cabi.org/cpc/datasheet/21913>). Photo 1 Sandra McDougal, NSW Department of Primary Industries, Yanco. Photo 2 Gerald Holmes, California Polytechnic State University at San Luis Obispo, Bugwood.org.

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Photo 1. Bacterial soft rot, *Pectobacterium carotovorum* subsp. *carotovorum*, in head of cabbage. Infection in the outer leaves progressively moves via the stem to younger leaves.



Photo 2. Slimy brown rot on the "head" of lettuce. Often these rots contain several species of bacteria causing soft rots, in addition to *Pectobacterium carotovorum* subsp. *carotovorum*.

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