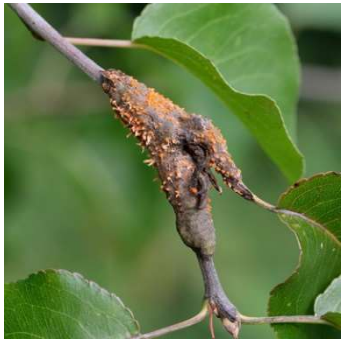
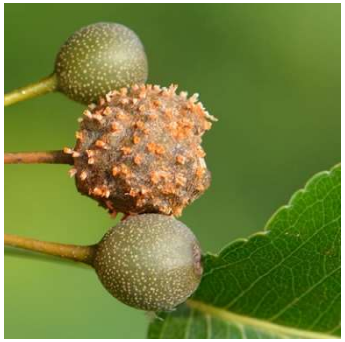
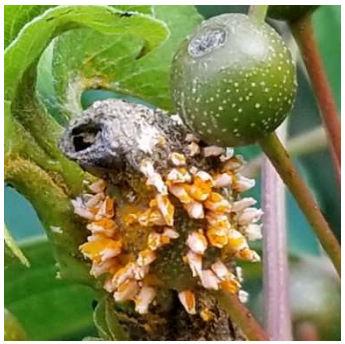
Cedar-Quince Rust *Gymnosporangium clavipes*
Cooke & Peck







ALTERNATE: Dept of Rec & Parks HQ, Columbia, 5/8/2018, *S. Muller*.
CLOSEUP (immature): Dunloggin Park, 7/6/2014, *N. Magnusson*.
CLOSEUP (immature): Western Regional Park, 7/12/2014, *R. Orr*.
CLOSEUP (on fruit): Western Regional Park, 7/12/2014, *R. Orr*.
FRUIT: Elkridge ES, 6/5/2020, *S. Muller*.

**Cedar-Quince Rust** *Gymnosporangium clavipes*
*Pucciniaceae*

| J | F | M | A | M | J | J | A | S | O | N | D |
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**ID**: Galls in quince, pear, apple and other trees produce jelly-like horns.

**Habitat**: Cedar and quince (and other *Rosaceae*) trees (alternate hosts)

**Fruiting Body**: 1 – 2 " gall [2.5 – 5 cm]
Small, greenish-brown swelling on twigs in fall. Overwinters as reddish dark-brown gall w/ small, circular depressions. In spring produces orange (immature) to orange-brown (mature) jelly-like horns (3/8 – 3/4" [1 – 2 cm].

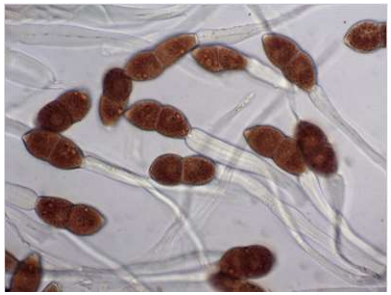
**Spores:** Irregularly ellipsoid, 2-celled, brownish walls.

**Frequency**: Occasional.

**Locations**: GULPKI, OTHER (3), WSTRP.

**Notes**: Mycobank 178591. The fungus infects a wide range of *Rosaceae*, such as apple, hawthorn and quince trees, and also requires an evergreen host such as Eastern Red Cedar or a number of other juniper species to complete its life cycle.* Species of *Amelanchier, Aronia, Chaenomeles, Crataegus, Mespilus* and *Photinia* have also been recorded as hosts.** Bottom three photos on left were on Bradford Pear (*Pyrus calleryana*).

**References**: E&S 330. *Wikipedia, http://www.cafcs.wvu.edu/kearneysville/pdfFiles/quincerust.PDF, **http://www.eppo.int/QUARANTINE/fungi/Gymnosporangium_clavipes/GYMNCL_ds.pdf http://extension.illinois.edu/hortanswers/detailProblem.cfm?PathogenID=8



SPORES (47.0-57.1 [63.5] x 23.4-26.0 µm): Dept of Rec & Parks HQ, Columbia, 5/8/2018, *R. Solem.*