

# Pest Alert: rose rosette virus (RRV)



**Figure 1.** Deformed flowers on infected rose  
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**Figure 2.** Rosetting and decline of infected host  
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**Figure 3.** Excessive thorniness and thickened stems (a);  
witches broom and reddened leaves (b) © Fera Science Ltd.

- **Rose rosette virus (RRV)** is a plant pathogenic virus, which was first found in Canada and the USA in the 1940s and is now found throughout most of the USA, some provinces in Canada and was introduced into West Bengal, India in 2017.
- Spread of the virus is primarily via **infected propagating material** and the microscopic mite *Phyllocoptes fructiphilus*, although another species, *P. arcani* has recently been reported as a vector. The mite can spread passively in air currents, by crawling between plants or on equipment or clothing.
- The major host of RRV is **rose**, with all species, including climbers, hybrid teas, floribundas, miniature and antique species and varieties, considered to be susceptible or potentially susceptible to the virus and vector.
- Symptoms of RRV are highly variable but can include **leaf mosaics and mottling**, **reddened leaves** (figure 3(b)), **excessive thorniness** (figure 3(a)), **thickened stems** (figure 3(a)), **witches broom** (figure 2 and 3), **reduced flowering** (figure 2) and **malformations** (figure 1).
- Infection can lead to **general decline**, **reductions in aesthetic quality** and **plant death** within five years of infection. This has led to severe economic impacts in the USA and the destruction of large scale amenity plantings.

**If you suspect the presence of the pest, please inform the relevant authority (see over for details).**

**For finds at garden centres, plant nurseries or private gardens in England and Wales, contact your local APHA Plant Health and Seeds Inspector, or the PHSI headquarters, in York:**

Tel: 0300 1000 313 (please select option 3 when calling)

Email: [planthealth.info@apha.gov.uk](mailto:planthealth.info@apha.gov.uk)

**For Scotland, contact the Scottish Government's Horticulture and Marketing Unit:**

Email: [hort.marketing@gov.scot](mailto:hort.marketing@gov.scot)

**For Northern Ireland, contact the DAERA Plant Health Inspection Branch:**

Tel: 0300 200 7847 Email: [planthealth@daera-ni.gov.uk](mailto:planthealth@daera-ni.gov.uk)

Web: <https://www.daera-ni.gov.uk/topics/plant-and-tree-health>

For additional information on UK Plant Health please see:

<https://planthealthportal.defra.gov.uk/pests-and-diseases/uk-plant-health-risk-register/>

<https://planthealthportal.defra.gov.uk/>

<https://www.gov.uk/plant-health-controls>

<http://www.gov.scot/Topics/farmingrural/Agriculture/plant/PlantHealth/PlantDiseases>

<https://www.daera-ni.gov.uk>