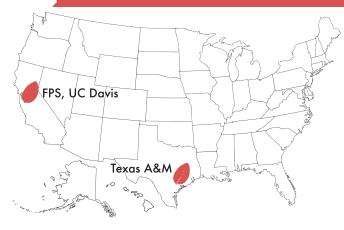
NCPN Roses Clean Plant Centers



Foundation Plant Services, University of California, Davis

- » Maintains Foundation Collection of over 700 virustested rose accessions, including 9 rootstocks.
- » Virus testing and elimination.
- » Conducts outreach programs.

Texas A & M University

- » Largest public rose breeding program in North America.
- » Extensive rose germplasm collection with species, Basye and Ralph Moore roses including those with high disease resistance, heat tolerance, and unique horticultural traits and plant growth habits.
- » Earth-Kind® testing program, developed to identify and promote rose cultivars well adapted to the southern and northern climates.
- »Outreach programs especially aimed at rose rosette virus and diagnostics.



About The Rose

In 1986, President Reagan signed a proclamation certifying the rose as the national floral emblem in a ceremony at the White House Rose Garden. Roses are an important ornamental specialty crop industry that contributes significantly to our economy. The annual value of garden roses is \$400 million (AmericanHort.org). The garden rose nursery industry is investing significantly in rose breeding programs nationally and internationally that are resulting in disease resistant roses that require minimal chemical inputs resulting in protection of US environmental quality.

Rose viruses have been found to be common in cultivated garden roses. Those viruses are easily transmitted to new roses propagated from infected stock. The garden rose industry understands that the effects of these viruses can be significant to the success of the commercial rose nursery business and the adoption of disease resistant, healthy roses in sustainable garden sites.

The solution is to ensure that valuable rose cultivars are available as virus-tested G1 stock to propagators.



Rose Rosette Disease

Rose rosette disease causes excessive shoot formation. leafiness, thorniness, leaf malformations and eventually death. First described in the 1940s, it was not until 2011 that the viral causal agent was discovered using high throughput sequencing. It is transmitted by eriophyid mites and through grafting and is widespread east of the Rocky Mountains in the US. Using clean plants is the best preventative measure for combating rose rosette.

About the National Clean Plant Network (NCPN)



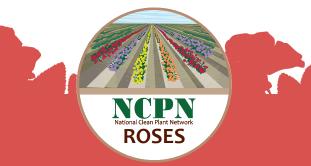
nationalcleanplantnetwork.org





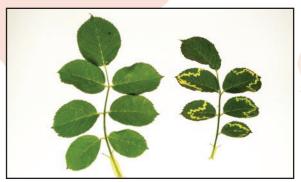
NCPN ROSES

National Clean Plant Network Roses



Start clean, stay clean. ncpnrose.org

ROSES National Clean Plant Network



Virus diseases in roses can cause unsightly foliage, decreased vigor, and smaller and/or fewer flowers. Nursery plant producers may face rejection of interstate shipments and eventual destruction of large numbers of plants as unsaleable.



What is the NCPN Roses?

NCPN Roses is a collaboration of clean plant centers, scientists, educators, state and federal regulators, large and small nurseries, rosarians, growers and industry and public garden associations that act together to ensure that rose budwood, cuttings and rootstock are clean and available. It was established in 2015 and is part of the NCPN specialty crops network.



We provide clean, tested propagation material to rose nurseries and growers throughout the United States.

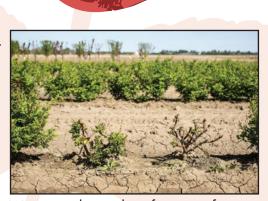


We develop state of the art techniques for detecting pathogens.



We establish and maintain extensive Foundation Collections with regular disease monitoring.

NCPN Roses clean plant centers improve the health and productivity of rose budwood, cuttings and rootstock in the U.S.



We rigorously test plants for viruses for at least two years.



We eliminate viruses using microshoot tip culture.