

USDA Forest Service, Forest Health Protection, Resistance Screening Center Services

Carol H. Young

Resistance Screening Center Manager, USDA Forest Service
Resistance Screening Center, 1579 Brevard Road, Asheville, NC, USA

The Resistance Screening Center (RSC) is operated by the Forest Health Protection unit of the USDA Forest Service, Southern Region, State and Private Forestry. The Center is located at the Bent Creek Experimental Forest near Asheville, NC, USA. The Center evaluates seedlings for resistance to disease, primarily fusiform rust (caused by *Cronartium quercuum* F. sp. *fusiforme*) and pitch canker (caused by *Fusarium circinatum*) as a service to tree improvement specialists, seed orchard managers, scientists, government agencies, research institutions, universities, and private industry. Testing enables clients to obtain information on the relative resistance of their materials in much less time than is possible in field progeny tests. The RSC has the flexibility to modify current screening procedures to accommodate specialized requests. This allows researchers to use the RSC as an additional experimental tool. In a research assistance capacity, the RSC has played an important role in newly developed understanding of genetic interactions in the pine-fusiform rust pathosystem and will continue to do so in the foreseeable future. By using information from the Resistance Screening Center tests, trees producing resistant progeny can be identified or questions may be answered concerning such things as the nature of pathogen variation or the effectiveness of fungicides. The RSC remains open to service screening work or research endeavors in an effort to improve forest health.