Development and testing in Horticulture for our region at the U of M North Central Research and Outreach Center Grand Rapids is going strong.

June 2014
Keith Mann, NCROC Research Plot Coordinator

The North Central Research and Outreach Center Grand Rapids, MN (NCROC) is the northern most university land grant research station in the continental United States. It is an ideal location for developing and testing new cultivars and unique methods of production for fruit, vegetable and ornamental plants in winter hardiness growing zones 2 and 3.

High Tunnel and season extension are a major part of the research occurring at NCROC. Experiments have investigated methods to extend the growing season by up to ten weeks. Crops such as tomatoes, cucumbers, peppers, raspberries, blackberries and strawberries have been trialed in the tunnel environment. Another experiment for which the Grand Rapids location is well-suited is severe woody ornamental testing. In this case, plants are over-wintered in a high tunnel structure that eliminates the insulating snow that can protect them during the harsh winter season. Additionally, one of the current studies taking place in a high tunnel is a leaf disease study on tomato plants. The research will evaluate the effectiveness of several organic and chemical treatments.

Breeding apples that can withstand subzero winter temperatures has been a long time research goal for the University of Minnesota’s horticulture program. Currently the NCROC apple orchard contains 85 varieties of apples including 43 named varieties and 42 breeding line varieties which are still under evaluation. Named varieties provide valuable comparison data for those breeding lines currently being reviewed. Honey Crisp, Zestar!, SnowSweet and SweeTango are examples of apple varieties that recently have been released to the public and have rapidly become prized commercial commodities.

Strawberries are another important crop for Minnesota gardeners and commercial growers. Varieties are evaluated for yield, flavor, and cold-hardiness. Named varieties are planted to judge ripening time for breeding lines (early, mid or late season). The breeding program also trials strawberry selections and releases from other programs. The best selections of strawberries will be propagated and tested on growers’ farms one more time before going to production.

The development of half-high blueberry cultivars has made successful production possible in our cold climate. Over the past 30 years, the blueberry plots have been the location for testing new varieties. NorthBlue, NorthSky, St. Cloud, Chippewa and Polaris are some of
the varieties that are particularly well-suited for northern Minnesota and can be found in the NCROC research plots.

NCROC is an All-America Selections trial garden location, where annual flowers are always a popular display. Every year several hundred different varieties and cultivars are tested. In addition, varieties from many other sources, such as Ball Flora and Proven Winners, are also on display. The annual flowers should be in peak form for the annual Horticulture Day Open House, held the last Wednesday in August. Please join us from 2:00 to 6:00 p.m. on August 27.

Feel free to stop by and walk through the research plots and gardens at any time. The Itasca County Master Gardeners will be available this summer from 10:00 a.m. until 2:00 p.m. on Wednesdays to answer your plant and gardening questions. For tours please call in advance to schedule, 218-327-4490.