Peach cultivar 'Contender' receives the 2014 American Society for Horticultural Science Outstanding Fruit Cultivar Award

Sponsor/Nomination by Christine Bradish, doctoral student, Horticultural Science, NC State University

Brief History and Development:

In 1951, a breeding program to develop superior peach cultivars was initiated by Professors Franklin Correll and Carlyle Clayton in conjunction with the North Carolina (Experiment Station, name at that time) Agricultural Research Service (NCARS), as a cooperative effort between the Departments of Horticultural Science and Plant Pathology at North Carolina State University. The objectives of the breeding program were to develop consistent cropping, high quality, freestone peach cultivars ripening from late May through August resistant to bacterial spot (*Xanthmonas arboricola* pv. *pruni*) and exhibiting resistance to flesh browning.

'Contender' was released as a public cultivar from NC State University in 1989. The original cross of 'Winblo' x NCX64 was made in 1974 by Correll, who selected it in 1977 at the Sandhills Research Station near Jackson Springs, NC. Dr. Dennis Werner took over the breeding program in 1979, and in conjunction with Dr. James Ballington, carried it through advanced selections and grower trials from 1980 through 1987 and release of the cultivar in 1989. Dr. David Ritchie, plant pathologist specializing in peach diseases, worked closely on disease trials for this and the other peach cultivars developed at NC State, and his efforts in conjunction with the department of Plant Pathology were crucial for the success of the peach program at NC State. Even though 'Contender' was originally released "…to fulfill the need for a high-quality, consistent-cropping, yellow-fleshed freestone cultivar ripening between 'Loring' and 'Elberta'", it has gone far beyond that, gaining respect and importance for researchers, commercial growers, and homeowners.

Significance and Impact of Cultivar, Scientifically, Commercially:

'Contender' is an industry standard. It is planted widely due to its high chilling requirement (~1050 hours), reducing its risk of freeze damage to bloom, and allowing for wide adaptability. 'Contender' is the number one commercial cultivar planted in North Carolina, and is planted commercially from Michigan to South Carolina. 'Contender' is a yellow-flesh, freestone peach that is valuable in both fresh and processing markets, having no flesh red pigmentation and being very resistant to browning after exposure to air. 'Contender' yields highly and is very vigorous, requiring heavy pruning and thinning

in the late winter and spring, but producing large fruit in high quantity in mid-July through mid-August depending upon geographical location.

In peach research and breeding programs, 'Contender' is important and used often. 'Contender' has moderate resistance to bacterial spot, showing minimal foliage and fruit symptoms under severe disease pressure. This in combination with its high yields, vigor, and chilling requirements make it a good parent in breeding programs and an elite check for production research studies. 'Contender' receives high ratings, and rave reviews from home gardeners for its yield, and ease of care and for flavor from the consumer. A description of 'Contender' from Gurney's nursery is as follows: "Excellent cold hardiness and tolerance to late-spring frosts make [it] superb for Northern growers. Marvelously melting, sweet yellow flesh. Extra-juicy freestone fruit…". The technical staff at the Sandhills Research Station, where 'Contender' was selected and tested, although they have many types of peaches to eat, say "…just wait until 'Contender' ".
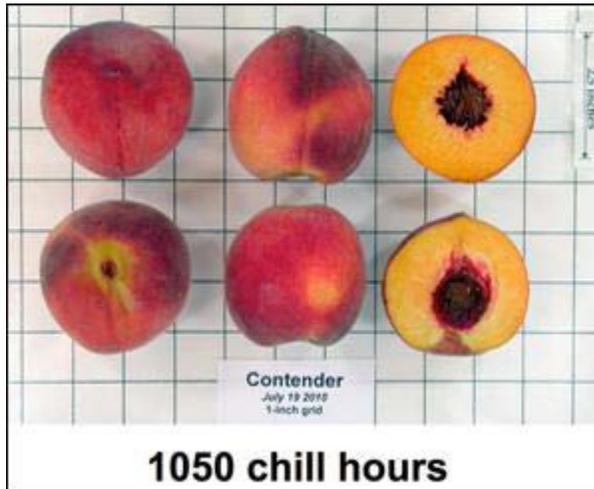
 Dr. Werner and Dr. Ballington have since gone on to work on other crops. Dr. Ritchie continues research on bacterial spot and other peach diseases. To this day, Dr. Werner Dr. Ballington, and Dr. Ritchie are regularly seen in the fields at the Sandhills, and the peach orchards are still the signature crop of the Sandhills Research Station.