Release of ‘Sugg’ Virginia-Type Peanut Cultivar.


The peanut breeding program at N.C. State University, in collaboration with state and federal scientists in North Carolina, Virginia, and South Carolina, announces the release of Sugg virginia-type peanut (Arachis hypogaea L.) cultivar. Sugg, named in honor of Norfleet “Fleet” Sugg and the late Joseph “Joe” Sugg, two cousins who served consecutively as executive directors of the N.C. Peanut Growers Assoc. from 1966 through 1993, was developed by the N.C Agric. Res. Serv. and was released in 2009. It is an F6-derived inbred line deriving 50% of its ancestry from virginia-type cultivar Gregory, 25% from Gregory sister line N90010E, and 25% from Sclerotinia-resistant runner cultivar Tamrun 98. Sugg is partially resistant to resistant to three of the four most common diseases in the Virginia-Carolina peanut production area: Cylindrocladium black rot (CBR), Sclerotinia blight (SB), and tomato spotted wilt virus (TSWV). It is susceptible to early leaf spot. It has seeds with pink testa averaging 886 mg seed-1, mean jumbo pod content of 44%, fancy pod content of 44%, extra large kernel content of 48%, sound mature kernel content of 66%, and total kernel content of 74%. Yield and grade of Sugg were evaluated over 8 years in the N.C. State Univ. trials, over 5 years in the three-state Peanut Variety and Quality Evaluation (PVQE) program, and over one year in the Uniform Peanut Performance Test (UPPT). Its yield has been superior in all those testing programs. In the 2005-2009 PVQE trials, yield of Sugg was greater than the mean yield of other virginia-type cultivars tested over the same period (5229 vs. 4928 kg ha-1, P<0.01) but less than the yield of Bailey (5229 vs. 5462, P<0.05), the highest yielding cultivar tested, and not different from the yield of NC-V 11 (5229 vs. 5098 kg ha-1, ns), the next highest-yielding cultivar. Sugg has superior pod brightness for use in in-shell peanut products, and its flavor profile is comparable to that of Florunner, the US peanut industry's flavor standard.