Breeding of Scab Resistant Apple Varieties

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Abstract

Apple scab is an important fungal disease caused by *Venturia inaequalis* (Cke) Wint. that requires intensive control measures in most regions throughout the world apple production. It’s a major problem, especially in temperate climates. The most effective method of controlling the disease is to use scab resistant apple varieties. Based on this phenomenon apple breeding studies have been started in Fruit Research Station to develop high quality new apple varieties resistant to apple scab. Hybridization studies were started in 2008 and so far approximately 17,208 genotypes were obtained. We used artificial inoculation, natural inoculation and molecular markers (SCAR primers) for selection of resistant apple genotypes. In 2012, the first flowers were observed in 16 seedlings while 2013 number of trees is 103. Hybridization studies are made in different crossing combinations each year.