Adaptability and Stability of Fruit Set and Production of Peach Trees under a Typical Subtropical Climate

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Brazilian peach breeding programs have been working to improve peach production, yield consistency, quality, and disease resistance. Every year several genotypes are selected and these traits must be assessed. This study aimed to evaluate adaptability and stability of fruit set and production of peach genotypes in a subtropical climate, using the GGE Biplot methodology. The design was completely randomized with three replicates (trees) in a factorial arrangement of 29 x 3 for genotype and growing season (2008/2009, 2009/2010 and 2010/2011), respectively. The genotypes Conserva 1129, Rubimel, Kampai, Tropic Beauty, and Conserva 967 had the greatest adaptability and stability for fruit set. While the genotypes Conserva 681, Santa Áurea, Atenas, Kampai Cascata 962, Tropic Beauty and Conserva 967 had the greatest production (Kg trees⁻¹) adaptability and stability. The GGE-Biplot methodology classified the peach tree genotypes for adaptability and stability of fruit set and production.

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