Abstract

With the purpose of selecting and recommending promissory cultivars of cotton, Gossypium hirsutum (L) with high yield potential and stability, for crop areas in Venezuela, the yield (seed included) of nine cotton varieties was evaluated. The data from the 1995-96 and 1996-97 cycles was used. The experimental design was a randomized completed block design with four repetitions on twelve environments. Parameters of stability offered by the methods of Eberhart and Russell, (1966), Cruz et al. (1989) and the AMMI model were estimated and compared to determine the best method or combination. There was no coincidence between the best yield varieties, Unellez-2 and the commercial variety Delta Pine 16, in relation to stability criteria. According to Eberhart and Russell, these were classified as stable, while according to Cruz et al. they were adaptive to favorable environments and according to AMMI they were unstable with high interaction. Of the three methods studied, the AMMI model allowed associating the response of high yield varieties to specific environments, gave more information and was easier to interpret.