



Adaptability of soybean cultivars in different crop years

I.O. Soares, P.M. Rezende, A.T. Bruzi, E.V. Zambiazzi, A.M. Zuffo,
K.B. Silva and R. Gwinner

Departamento de Agricultura, Universidade Federal de Lavras, Lavras, MG,
Brasil

Corresponding author: I.O. Soares
E-mail: igoroliveri@yahoo.com.br

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ABSTRACT. Soybean is one of the main sources of foreign exchange credits for Brazil in the agricultural sector. There is increasing interest in growing this leguminous crop, especially in the southern region of Minas Gerais, due to its importance as an alternative for crop rotation with maize. In this respect, the study of the adaptability of new cultivars to the region is indispensable so as to obtain high yields. Thus, the aim of this study was to evaluate the performance of 38 soybean cultivars for growing in the summer season in the municipality of Lavras, MG, Brazil, in the 2010/2011 and 2011/2012 crop years. The experiments were conducted in a randomized block design with 3 replications and the treatments consisted of 38 cultivars. At the time of harvest, the following assessments were made: grain yield (kg/ha), height of the lowest pod (cm), plant height (cm), and lodging. The data were subjected to individual and combined analysis of variance. The phenotypic mean values were clustered, adopting the Scott and Knott test. For simultaneous selection of multiple traits, the sum of rank index of Mulamba and Mock was adopted. The cultivar TMG 801 RR had the best yield performance; the cultivars Monsoy 8001, MGBR-46

(Conquista), and BRSMG 68 (Vencedora) also stood out. Considering simultaneous selection for grain yield, plant height, height of the lowest pod, and lodging, the cultivar TMG 801 RR is recommended for growing in the summer season in the southern region of Minas Gerais.

Key words: Cultivar selection; Genotype x crop year interaction; *Glycine max*; Selection index