

Effect of the *Southern bean mosaic virus* on three yield components in the bean variety (*Phaseolus vulgaris* L.) 'U.C.V. Manuare' and its seed transmission.

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Abstract

The *Southern bean mosaic virus* (SBMV), strain B, when mechanically inoculated on plants of the variety 'UCV-Manuare', at 10 and 20 days after sowing, significantly reduced the yield components: seed weight / plant, N° of seed / plant and N° of pods / plant. The largest percentages of reduction were obtained for seed weight / plant (70, 04 %) and N° of seed / plant (65, 85 %) in plants inoculated at 10 days. The inoculated plants presented a longer cycle of growth (seven days more) than that of the non-inoculated checks. SBMV was transmitted in 11, 72 % of the seed. The largest transmission percentage (14, 61 %) was obtained with seeds coming from 10 days the inoculation. However, not statistically significant differences among treatments were observed. Association occurred between the SBMV and the *Quail pea mosaic virus* (QPMV). The use of resistant cultivars to the VMSC is recommended as control measure.

Key words: *Phaseolus vulgaris*, bean, southern bean mosaic virus, seed transmission, yield.

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