ABSTRACT

This research aimed to study growth, production and seed quality of soybean under rainfall simulation during reproductive stage, as well as to determine tolerance level of different soybean varieties to rainfall impact. It was arranged in 2-factor randomized complete block design. First factor was soybean variety, namely Wilis and Tampomas. The second one was duration of rainfall simulation, which consisted of seven levels, i.e. no simulation, and starting at 10, 20, 30, 40, 50 and 60 days toward harvest, respectively. Results showed, that reproductive stage of soybean was a critical period that was very susceptible to rainfall impact. Wilis variety was more resistant to rainfall impact during reproductive stage compared to Tampomas. Moreover, it was found, that rainfall simulation during reproductive stage delayed pollination and subsequently pod-filling and seed maturity.

Keywords: soybean, rainfall impact, reproductive stage