Abstract

The use of cover crops is important for the agricultural crop and soil management in order to improve the system and, consequently, to increase yield. Therefore, the present study analyzed the effect of crop residues of black oat (Avena strigosa Schreb.) (BO) and a cocktail (CO) of BO, forage turnip (Raphanus sativus L.) (FT) and common vetch (Vicia sativa L.) (V) on the emergence speed index (ESI), seedling emergence speed (SES) plant height and soybean yield in different intervals between cover crop desiccation with glyphosate 480 (3 L ha⁻¹). Plots of 5 x 2.5 m with 1 m of border received four treatments with BO cover crops and four with CO as well as a control for each cover crop, at random, with five replications. The plots were desiccated in intervals of 1, 10, 20 and 30 days before soybean seeding. The harvest was manual while yield was adjusted to 13% of moisture content. The experimental design was completely randomized with splitplots and means compared by the Scott and Knott test at 5% of significance. The results showed that CO of cover crops can be recommended for soybean to obtain a more vigorous seedling emergence, from 10 days after cover crop desiccation.

Keywords

No-tillage system, crop rotation, Glycine max (L.) Merr.