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## **INTERCROPPING SUGAR BEET AND POPPY SEED: OPPORTUNITIES AND CHALLENGES**

### **ABSTRACT**

Production of sugar beet in Serbia was halved in the season of 2015, due to summer drought and low root price. The low sugar price on the world market makes the future of sugar beet cultivation in Serbia uncertain. Neither poppy production in Serbia is in the better position, although it has a long tradition and the growing conditions are favourable. Intercropping of these crops looks as one of the possible solutions to overcome the current problems and improve production of both sugar beet and poppy. Therefore we intercropped the two species in a field experiment which is to our knowledge the first such trial. The trial was established in the growing season of 2015, at the experimental field Backi Petrovac, Institute of Field and Vegetable Crops, Novi Sad. Since the suppression of broad leaf weeds in such production was impossible, the production was organized in organic form. The field trial consisted of control in which only sugar beet was sown and the treatment where the sugar beet and poppy plants were grown together. After germination *Tanymecus dilaticollis* Gyll destroyed all sugar beets not intercropped with poppy. Additional intercropping benefits are sowing at the same time, the same distance between the rows, a good coverage area, the different length of vegetation (organisation of field works) and more efficient use of land. Also many challenges are defined in this type of production such as: difficulty in performing mechanical sowing, incompatibility in terms of weed control and the inability of poppy mechanical harvesting. The results present the basis for further research in this area, which are planned to be implemented in the coming years.

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