Research Concerning the Influence of Technological Links on Weed in Vineyards

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SUMMARY

One of the limiting factors in the production of grapes is the weeds that compete with vines, its nutrition stealing vine space by consuming of water and nutrients. Researches have been undertaken in the experimental field of SCDVV Bujoru from "Dealurile Bujorului" Vineyard, located in Covurlui plateau. The soil (Cambic Chernozem) used as experimental field, is poorly supplied with nitrogen and medium assimilated phosphorus and potassium. For research we used two maintenance systems (black field and herbicides) and four fertilization types of manure: mineral, manure, green manure and composted grape marc. Between fertilization and mapping weeds there is a strong interaction on production, fertilization increasing the effect of herbicides, while the herbicides increase the favorable effect of manure by eliminating the weeds. Weeds mapping has been made on the experimental plot by gravimetric quantitative method. The results of measurements show a roughly equal proportion between the annual dicotyledonous weed species and perennial, with little fluctuation during the experiment. Measurements were made in June and August. After harvesting the weeds were divided into botanical groups: monocotyledonous, dicotyledonous, annual, perennial. By performing maintenance on the ground to destroy weeds and worked on improving soil properties, which contributed to water retention in soil and air, an element responsible for the nutrient regime. The use of herbicides has proven an effective method for weeds control in the experimental plot. Green fertilizers have greatly contributed to weed control, because their early emergence and nutrition covering space has prevented their development, significantly reducing their number. Marc compost reduced the number of weeds per square meter and weight. Its effect was potentiated by herbicides. Application of mineral fertilizers and manure has increased the weight of weeds. Annual weeds were largely destroyed while the perennial (Convolvulus, Cirsium) were partially restored but were much weaker. Annual monocotyledonous weeds were partially destroyed when the herbicide use was made while the plants were still young.

Keywords: mapping, fertilization, soil maintenance.

REFERENCES