

RESEARCH ON THE INFLUENCE OF NUTRITION ON THE PRODUCTION OF SPACE AND QUALITY HERBA *Hyssopus officinalis* L. (HYSSOP) CULTIVATED ECOLOGICAL CONDITIONS IN A.R.D.S. SECUIENI

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Abstract

Hyssopus officinalis L. (hyssop) has been known as a medicinal plant since ancient times. Grown for herba contains volatile oil (0.5 and 1.3 % in dry herba between 0.10 and 0.15 % in fresh herba), flavonoids, ursolic and oleanolic acids, carbohydrates, hisopina, tannins, resins, gums, sugars and a substance with antiviral marubiina, which gives a bitter taste. Due to the volatile oil constituents, the plant has antiseptic expectorant action and is bitter tonic (because marubiinei) and slightly astringent (due to tannins). Climatic conditions during the experiment were good, the average temperature in the two years was 9,15⁰ C, the difference from the annual average (8.7°C) being 0.45°C. The amount of rainfall was 488.5 mm by 59.4 mm less than the annual average (552.1mm). The average for the two years of experimentation average number of branches per plant ranged from 14.27 branches/plant variant sown at 50 cm between rows and incineration (Mt.) and 23 branches/plant variant sown at 70 cm between rows and incineration. The average length of inflorescence was higher (12.25 cm) in variant sown distance of 70 cm between rows and 20 cm between plants in the row. Regarding the production of dry herba it was influenced by both the distance between rows (average factor A) and the distance between plants in the row (average factor B). The average for the two years of experimentation, production highest (2510 kg/ha) was obtained in the variant sown at a distance of 70 cm between rows and 20 cm between plants in the row. An average production close of 2368 kg/ha was obtained in variant sown at a distance of 70 cm between rows and 30 cm between plants in the row. Highest production of essential oil (80.88 l/ha) was obtained in the variant sown at a distance of 70 cm between rows and 20 cm between plants in the row.

Key words: ecological, hyssop, herba, nutrition, space