

DEPENDENCE OF THE YIELD OF HYSSOP OFFICINALIS ON MOISTURE WHEN GROWN IN THE SOUTH OF UKRAINE

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ABSTRACT

Due to the uncontrolled anthropogenic impact on the environment and climate change, research aimed at introducing highly effective competitive technologies for growing medicinal raw materials is becoming increasingly relevant and in demand. Among such plants, a special place is occupied by *Hyssopus officinalis*, which is known for its drought resistance. The lack of sufficient moisture supply, that is, its deficiency, did not significantly affect the duration of seasonal rhythms of hyssop, which confirms its adaptability to arid environmental conditions. This statement also corresponds to the results of experiments obtained in the semi-arid Khorasan region of Iran. The results showed that there was a high potential for water savings due to longer watering intervals using plants *Hyssopus officinalis* adapted to local conditions. Thus, *Hyssopus officinalis* can serve as an alternative source of income in dry years. Experiments in the conditions of the Southern steppe of Ukraine have confirmed that to increase the yield of hyssop, it is necessary to observe the drip irrigation regime, which maintains pre-irrigation soil moisture at the level of 80-70-70% HB or 90-80-70% HB, which contributes to the formation of a high yield of medicinal raw materials. Thus, common hyssop is a drought-resistant crop, but it is more productive on drip irrigation.

Keywords: hyssop, drip irrigation, moisture, drought resistance