

INFLUENCE OF NON-ROOT FERTILIZER BY MICROELEMENTS ON GINSENG YIELD

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The article shows the state of the problem with the introduction of ginseng in the Polesie zone of Ukraine. The main goal was to study the effect of “Reakom” micronutrient fertilizers (Zn, Cu, B, Mo, Co, P₂O₅, K₂O) at a dose of 2.5 l/ha and 5 l/ha on the growth of the aerial part and the roots of three-year-old seedlings and six-year-old ginseng seedlings, the contents of macro- and microelements in plant leaves, the fruiting productivity of six-year-old plants in the conditions of Polissya Ukraine. The studies were conducted on the territory of the Boyarsky LDS on sod-podzolic light-loamy soil on fluvioglacial sands, which are underlain by moraine.

The use of “Reakom” micronutrient fertilizers in foliar dressing of plants contributed to an increase in fruiting productivity and an increase in root mass by 25-35%, the phytochemical parameters of which corresponded to the requirements of the temporary pharmacopoeial article 42B-163/160 / 37-536-97 and were classified as commodity. The greatest yield of three-year-old ginseng roots was recorded at the maximum dose of “Reakom” foliar fertilizer for garden crops, but they had the greatest mass when sprayed with “Reakom” for ginseng N 1 at a dose of 5 l/ha. Six-year-old ginseng roots formed the maximum productivity and root yield with a lower dose of “Reakom” for ginseng N 2.

One of the reasons for refusing to grow ginseng plants is its specific requirements for climatic and soil conditions. It is mostly grown by South Korea - 27480t, China - 44749t, USA -1054t, Canada -6486t. The total production of these countries is 79769t, which is about 99% of world ginseng production. Ukraine imports this raw material at US \$ 106,000, indicating a high need for this raw material.

In the cultivation of ginseng, great attention is paid to the study of the physicochemical and agrochemical parameters of the soil, and the effect of trace elements on the growth and yield of ginseng on poor, low-trace fertile soils has not been sufficiently studied.

Micronutrients are important in ginseng nutrition, despite their low soil concentration compared to macronutrients. Thus, the dynamic range of optimal concentrations of trace elements is narrow and requires rigid regulation to meet plant requirements in different environmental conditions.