

THE USE OF RESULTS OF "JODIS-CONCENTRATE" BY FOREST SILK PRODUCTION

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On the basis of long-term experiments to use the raw material for the production of iodized products "Jodis-concentrate" for oak silkworm (*Antheraea pernyi*) cultivation are encouraged.

"Jodis-concentrate" is a product of new generation. According to Directive 2002/46/EU of 10 June 2002 allowed for use iodized food iodide and potassium iodate or iodide and iodate sodium, which is taken as a basis in the production of concentrate]. The second part of "Jodis-concentrate" is a mineral artesian water containing natural organic matter to 30,0 mg / dm³. Implementing the properties of water to create associates, conducted concentrated iodine complex compounds. "Jodis-concentrate" difference from other commonly used compounds of iodine is that in 'iodine ion – water' (in the classical case) iodide or iodate of associates formed by weak hydrogen bonds.

Established that "Jodis-concentrate" can be considered extremely valuable iodine-containing drug to overcome one of the major deficiency of essential micronutrients. It is used in medicine, agriculture and food industry.

"Jodis-concentrate" in the processing of Gran useful silkworms provides growth inhibition of pathogenic and opportunistic bacteria and fungi on the surface of eggs, accelerates and increases the revival of a track from Gran improves immune status insects. This positive effect on the survival of a track (increased by 10,9 %), and makes it possible to get more (5,6 %) varietal cocoons.

Using "Jodis-concentrate" as a feed additive healthy and potentially ill-IV caterpillars and age it possible to increase survival rates at 46,0 % of caterpillars spray feed and 22,8% – with immersion shoots investigated solution to reduce the length of crawler period of 3 days, increase the mass of caterpillars by 30 %, cocoons – by 22,0 %, and a lot of silk shell investigated ways in drug use – by 38,4 % and 32,8 % with respect to control.

Established that "Jodis-concentrate" effectively heals insect population, weakened bacteriosis. The death of the insect research decreased by half, significantly improved agronomic performance and reproductive function butterflies.

First proposed a method of preserving leaf mass storage feed on oak moth with "Jodis-concentrate" at a rate of 0,1 liters per 1 kg of leaves.

Power moth caterpillars oak leaves treated "Jodis-concentrate" leads to a marked improvement in their physiological state. Income immunomodulating drug in the body oak moth causes increased differentiation process hemocytes, intensifies the

biosynthesis, metabolism and accumulation of protein, especially when using concentrations "Jodis-concentrate" 30 mg/dm³.