

عنوان مقاله:

Improving the Traction and Adhesion Properties of Nano Water Sprinkling Machines Fregat in Areas with Rugged Terrain

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خلاصه مقاله:

In recent years, nanotechnology has been considered a useful technology for agriculture and has been studied in the fields of water management and crop production and the use of nanotechnology in crop breeding, production, and plant protection methods. In comparison with other agricultural machinery, Nano water sprinkling machines Fregat has more difficult working conditions in terms of rutting and traction-adhesion properties due to reduced bearing capacity of wetted soils, long sprinkling machine lengths, and irrigated areas with a wide range of strength and relief characteristics. Therefore, the most important in improving multi-support sprinkling machines is, first of all, the study of the soil-relief conditions of irrigated lands and their influence on the technological and technical ways of solving the problem of its soil trafficability. Also important is the issue of adhesion of the undercarriage systems of the sprinkling machine bogies. Fregat sprinkling machine DMU-B-۴۶۳-۹۰ was used in the Lukhovitsky District of the Moscow Region. The stuhollow punches were carried out on soddy podzolic medium loamy soils. Cleaning devices for undercarriage systems providing wheel cleaning have been proposed. According to industrial research data obtained in production conditions, all high-quality operational, technological, and reliability indicators of Fregat sprinkling machines equipped with cleaning devices have rather high values, correspond to agrotechnical requirements, and .% exceed similar values inherent in the serial modifications of other sprinkling machines on average by ۳۰-۳۵

کلمات کلیدی:

Sprinkling Machine, Soil And Relief Conditions, Traction And Adhesion Properties, Cleaning Device

