

Studies on the track sprayer with swing spray nozzle

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Summary

For accelerating chemical spray mechanization of narrow spacing orchard, the develop of track sprayer was constituted of 10HP gasoline engine, 1 inch high pressure sprayer, chemical tank with 200 liter capacity and walking track. ¹ The mechanical body with 70cm width and low center of gravity could turn aside with small curve at original location. The sprayer with swing spray nozzle could be adjusted for long or short distance spraying which had good adherent effects on leaf surface and leaf back, and could be applicable to control pests and diseases, and the misty chemical solution could cover whole plant resulting better control pests and diseases due to spraying width reaching 10m both sides. The assessment of the water-sensitive paper on the leaf's adherent dosage was between 8.1to5.0, The spraying operation efficiency of track sprayer with 7.5min/0.1ha was 3.5times fast as compared to the farmers' traditional spraying. ^o

Keywords : Orchard, Track sprayer, Swing spray nozzle

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