

RESEARCH PAPER

Integrated pest and disease management for sustainable small onion production in Ramanayakanpatti village of Namakkal district

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Ramanayakanpatti, Pudhuchathiram block, Namakkal district, Tamil Nadu is one of the main small onion cultivating village in an area of 712 acres. In this village small onion variety Co4 is cultivated mainly in *Rabi* season (October – December). Onion is mainly affected by basal rot and thrips resulting in a yield loss of 30 – 40 per cent. Farmers sprayed profenophos @ 4 ml/ lit from 30 days after sowing at 15 days interval thrice for thrips management and also followed seed treatment with SAAF @ 3 g/kg to control basal rot. They spent Rs. 6600 – 7000 /0.4 ha- for chemical spray. Under front line demonstration, IPDM practice was followed to control basal rot and thrips in small onion in an area of 30 ha covering 75 farmers. A package of IPDM practices was followed for entire crop duration, which included seed treatment with bio control agents *Trichoderma viride* @ 4g/kg of bulb + *Pseudomonas fluorescence* @ 10g/kg of bulb was done 12 hrs before sowing. Then five days after sowing of bulbs, a barrier crop maize variety NK 6240 was sown around the field and ridges at a spacing of 15 cm interval, to prevent the entry of thrips from the outside field. Thereafter, blue sticky traps were installed at 10 m interval with a total of 20 traps /0.4 ha at 30 cm height above the onion plant. It attracted 82 per cent of thrips within the field in 30 - 40 days after sowing. All the IPDM practiced farmers did not spray any chemical for the entire crop cultivation period and also they spend only Rs.1028/-for IPDM practices in addition to getting a yield of 7.3 to 8 tonnes /0.4ha.

Key words : Ramanaickenpatti, IPDM practices, Basal rot, Thrips, Small onion

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