



Crop diversification for Sustainable Management of Blossom Midge (*Contarinia maculipennis* Felt) of Jasmine (*Jasminum sambac* L.)

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Abstract: A field trial was conducted to study the influence of crop diversification through intercropping on the incidence of blossom midge, *Contarinia maculipennis* of Jasmine. There was significant reduction in incidence of the pest in intercropped treatments over monocrop of jasmine. Marigold recorded significantly the lowest mean incidence of 15.37 per cent, followed by gingelly and coriander with jasmine as sole crop recorded highest blossom midge incidence (22.17 per cent). Among the intercrops, higher incidence of blossom midge was recorded in jasmine intercropped with fennel and fenugreek. Jasmine intercropped with marigold recorded 30.67 per cent reduced blossom midge incidence than sole jasmine crop. The population of natural enemies viz., coccinellids, chrysopids, preying mantises and spiders were more recorded in marigold intercropped jasmine with 8.70, 3.60, 4.40 and 5.30 no's/five plants respectively. Moreover, the emergence of a specific midge predator, *Systasis dasyneurae* were more encountered in jasmine intercropped with marigold (4.30 adults/50 infested buds) than sole jasmine crop. The pest defender ratio was highest in jasmine + marigold (1:3.50) and the order falls as jasmine + coriander (1:3.05) and jasmine + gingelly (1:2.34). The data indicated the supremacy of marigold in reducing the incidence of the blossom midge as well as attracting more natural enemy population, bagging the credit of eco-feast crop.

Keywords: Blossom midge, Jasmine, Crop diversification
