

# Effect of Sowing Dates and Plant Protection Aspects on The Incidence of Vector Leaf Hopper and Sesame Phyllody

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## ABSTRACT

A field experiment was conducted during late *rabi* season of 2016 and 2017 to evaluate the effect of sowing dates and plant protection on the buildup of cicadellid and in turn sesame phyllody for realizing higher seed yield. The experiment was laid out in Factorial Randomized Block Design with three replications. Experimental factors were five sowing dates with 15 days interval (December 15, 31, January 17, February 5 and 21), spraying with imidachloprid 17.8 SL @ 0.3 ml l<sup>-1</sup> applied twice at 30 and 50 days after sowing and control. The results showed that spraying had significant effect on the rate of phyllody incidence and the yield was significantly decreased at 5 per cent level in untreated plot (159.9 kg ha<sup>-1</sup>) compared to treated main plot (245.3 kg ha<sup>-1</sup>). Date of sowing had significant effect on the leaf hopper population, disease incidence rate and yield at 5 per cent level. The results inferred that highest seed yield (299.5 kg ha<sup>-1</sup>), lowest disease incidence (0.05%) and leaf hopper population (0.17 per plant) were observed in early sowing date (15<sup>th</sup> December) and spraying with systemic insecticide. Most of these parameters were statistically identical to 31<sup>st</sup> December sowing but all of them were recorded significantly lowest in 21<sup>st</sup> February sowing as the incidence of phyllody was high (7.25 %) due to population build up of the vector with increased temperatures and subsequent migration from adjacent plots approaching maturity. Data indicated that early infestation by leafhopper in late sown crop was the most damaging and resulted in highest phyllody and yield reduction.

**Key words:** *Insecticide spray, Leafhopper, phyllody, Sesame variety Gowri, sowing date.*