

**Research Article**

# **Phenotyping of Okra Germplasm for Resistance to Okra Enation Leaf Curl Disease and Field Evaluation of Insecticides for its Management**

**Sonal Mishra, Puja Pandey and Mihir M Pandya**

*Anand Agricultural University, Anand 388 110, Gujarat, India; Email [pujapandey41124@gmail.com](mailto:pujapandey41124@gmail.com)*

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## **Abstract**

*Okra enation leaf curl virus* (OELCuV) adversely affects the potential and productivity of okra crop and in present scenario it is an emerging disease and development of OELCuV-resistant varieties is an economical and environmentally friendly approach to managing the disease. Looking in to this a field screening experiment was conducted. Among the fifty-seven okra varieties and germplasm screened against OELCuV under field conditions during *Kharif*, 2022, the final disease reaction revealed that 9 varieties/germplasm namely, Prabhani Kranti, GAO 5, GJO 3, Pusasawani, GP-OK-243, GP-OK-262, GP-OK-296, GP-OK-373 and GP-OK-391 exhibited highly resistant reaction to OELCuV while, 15 okra germplasm/ varieties exhibited resistant reaction, 13 varieties/germplasm expressed moderately resistant reactions, 11 germplasm/varieties showed moderately susceptible reaction, 5 germplasm/ varieties showed susceptible reaction and 4 varieties/germplasm found to be highly susceptible to OELCuV. The AUDPC and infection rate (r) found to be lower for resistant germplasm/ varieties reaction and higher for susceptible reaction. The field evaluation of insecticides against OELCuV and its vector revealed that two foliar sprays of Tolfenpyrad 15 EC, 0.03 per cent and Diafenthiuron 47 + Bifenthrin 9.4 SC, 0.0705 per cent, at 15 days interval commencing from the appearance of whitefly vector was most effective and economical in managing okra enation leaf curl disease and its vector. The resistant germplasm/varieties selected might be used as OELCuV resistant parent(s) in breeding programs.

**Key words:** Field screening, insecticidal management, *Okra enation leaf curl virus*

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