

## VARIETY IMPROVEMENT AND PEST MANAGEMENT SECTION

## **Downy Mildew Resistance Trial, PHIL 2019 Series**

- Date of Completion of Study: August 2023
- > Date of Completion of Terminal Report: November 2023

One hundred eighty selected clones of Phil 2019 series were tested against downy mildew of sugarcane. The experiment was laid-out in randomized complete block design with four replications, under La Granja conditions. VMC 86-550 was used as spreader rows, were also laid out in between test clones to ensure natural infection. Determination of the disease rating was done by phenotypic screening. Rating of downy mildew was scored based on International Rating Scale.

In plant cane, the reactions of the test clones to the disease are as follows; forty (40) clones were very highly resistant, forty-six (46) highly resistant, thirty-five (35) resistant, thirty-four (34) intermediate resistant, eleven (11) intermediate average, five (5) intermediate susceptible, three (3) susceptible and six (6) very highly susceptible. While in ratoon cane, twenty-four (24) clones were very highly resistant, forty-one (41) highly resistant, forty-three (43) resistant, forty-one (41) intermediate resistant, sixteen (16 intermediate average, four (4) intermediate susceptible, three (3) susceptible, and eight (8) very highly susceptible. VMC 86-550, used as a spreader row consistently got a rating of 9 which is very highly susceptible. Clones with ratings 1-4 were recommended for further testing.

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