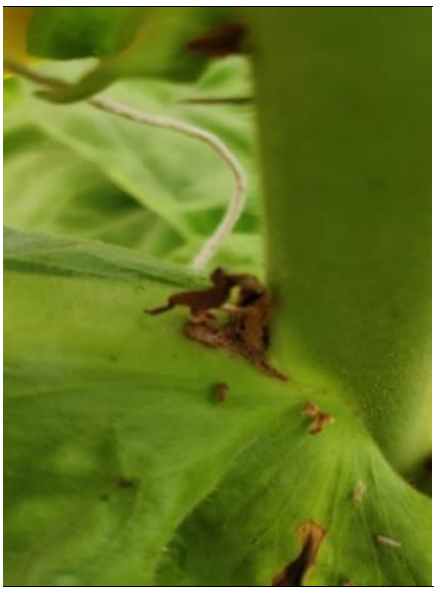
A Novel Suckercide (SUCKERSTOP^{TM}) for controlling suckers in FCV tobacco

A new locally systemic suckericide (a member of dinitroaniline group) was synthesized in collaboration with M/S M.R. Biochem Ltd., Hyderabad under the technical guidance of ICAR - CTRI, Rajahmundry in a PPP mode. The new suckercide was developed with an objective to control the suckers effectively in FCV tobacco as the existing contact suckericide i.e. Decanol is not controlling effectively and requiring two applications. The chemical was evaluated at three locations ICAR-CTRI research farms of Hunsur (Karnataka), Jeelugumilli and Kandukur (Andhra Pradesh) situated in different agro-climatic regions to see its efficacy, and to fix the dose of usage, optimum time of application and residual effect. It was evaluated with FCV tobacco variety i.e. FCJ 11 with different treatments i.e 1) Decanol @ 40 mL/L, 2) New suckericide (17.5 % EC) @15 mL/L; @ 20 mL/L; @ 25 mL/L, Hand Suckering and Control (No topping). Sucker weight was only 3.4 g/plot with 25 ml/l of Sucker stop compared to 41g per plot with Decanol. Efficacy of the new suckercide (17.5 % EC) at a dose of 25 ml/l was up to 93 % under irrigated condition in farmer fields. Similar effect was found in rainfed FCV Tobacco in the variety FCR-15 where about 50 % reduction in sucker dry weight (16 kg/ha) with the application of new suckercide compared to 4% Decanol (Contact Suckercide) of 31.8 kg/ha. The recommended dosage of new suckercide @ 20- 25 ml/liter of water and 8-12 ml of mixed solution is to be applied per plant just after topping at bud initiation stage or before flowering.

Suckerstop offers a highly effective, single-time application solution for controlling sucker growth in tobacco plants after topping, making it an ideal choice for farmers seeking efficiency and quality. As a locally systemic treatment, it targets suckers precisely while significantly reducing labour requirements by 50%, allowing growers to allocate resources more effectively. With low-level residues well below the Global Residue Limit (GRL), it ensures safety and compliance. Ultimately, Suckerstop enhances the yield of superior-quality cured tobacco leaves, delivering both agronomic and economic benefits through its targeted, labour-saving approach.

1a. Suckercide application in farmer fields

1b. Dead sucker



1c Dead sucker