

PATHOGENECITY TEST BY USING DIFFERENT INOCULATION METHODS ON *XANTHOMONAS CAMPESTRIS* PV *CAMPESTRIS* CAUSED OF BLACK ROT OF CABBAGE

ATIT MAJI¹ & RANJAN NATH²

¹Ramkrishna Ashram Krishi Vigyan Kendra, Nimpith, South-24 Parganas, West Bengal, India

²Department of Plant Protection, Palli Siksha Bhavana, Sriniketan, Visva Bharati, Birbhum, West Bengal, India

ABSTRACT

Black rot is a major disease of cabbage (*Brassica oleracea* var. *capitata*), caused by *Xanthomonas campestris* pv. *campestris* (*Xcc*). Using six different inoculation techniques, such as (1) Spraying the inoculums by way of hand atomizer (2) Carborundum abrasion method (3) Multi-needle pricking method (4) Injection infiltration method (5) Hydathodes inoculation method and (6) Scissor clipping among these six techniques carborundum abrasion method gave quicker symptom expression as well as lesion progress on leaf, followed by the hydathode inoculation method, spray inoculation after multi-needle pricking and spray inoculation on uninjured surface respectively.

KEYWORDS: Pathogenicity Test, Inoculation Methods and *Xanthomonas campestris* pv. *Campestris*