A NEW BACTERIAL WILT OF *COLEUS VETTIVEROIDES* JACOB

Coleus vettiveroides Jacob (Labiatae) is an important medicinal plant, commonly called as 'Erueli' in Malayalam. The plants grown at main campus of the Kerala Agricultural University at Vellanikkara, Thrissur exhibited symptoms of severe wilting during the south west monsoon season. This typical wilt disease was also noticed in the Aromatic and Medicinal Plants Research Station, Odakkali, Ernakulam District under the Kerala Agricultural University. The initial symptom of the disease appeared as loss of turgidity and drooping of leaves with slight yellowing. Then the plants wilted and dried up. Discolouration of vascular bundles was noticed when the infected stem split opened longitudinally and bacterial ooze was also noticed.

The bacterium was isolated on PDA medium. Inoculation of the bacterium on to pin pricked leaf axil of healthy plant produced characteristic wilt symptom within 5 to 10 days.

Cultural and biochemical studies were carried out to establish the identity of the bacterium. The bacterium was gram negative short rods which reduced nitrates and did not hydrolyse starch. The bacterium was catalase positive and did not liquefy gelatin; milk was slightly curdled with the production of acid; arginine hydrolase activity was negative and the growth was slightly inhibited with 2% sodium chloride; utilized sucrose, glucose and dextrose.

The above properties of the bacterium are in agreement with the general characters of *Pseudomonas solanacearum* as given in the Bergey's Manual of Determinative Bacteriology (Breed *et al.*, 1957; Buchanan and Gibbons, 1974). So, based on the cultural and biochemical characters and the pathogenicity trial on *Coleus vettiveroides*, the causal bacterium is identified as *Pseudomonas solanacearum* E.F. Smith. This is the first report of this pathogen on *Coleus vettiveroides.*

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