

Alternate hosts of PIPER YELLOW MOTTLE VIRUS (PYMV), the causal agent of "Little leaf disease" of *Piper nigrum* L. (Black Pepper)

Black pepper (*piper nigrum* L) is affected by a disease caused by Piper yellow mottle bandnavirus (PYMV). PYMV is a new member of Badnavirus group and the origin of the virus is not yet known. Therefore, the host range studies were conducted to find out the information on susceptible wild accessions of Piper and the weed species, which will be useful in PYMV control programme.

Wild Piper accessions were screened by graft inoculation and then the susceptibility was detected either by polymerase chain reaction (PCR) or by immunosorbant electron microscopy (ISEM). Of the five wild *Piper spp.*, only *P. Sylvester* and obtaining a 600 dp size product of virus origin by PCR and detecting PYMV particles by immunosorbant electron microscopy (ISEM) respectively. *P. sriboea* always had successful graft unions but showed no positive signals either by graft transmission but unable to recover PYMV by PCR. The cultivated *P. betel* always failed to give successful graft unions.

Resistance found on *P. sriboea* might be important in future breeding programme against PYMV disease. Further more, the results confirmed that PYMV has no wide host range and is similar to other badnaviruses. These results illustrate that there is not much risk of PYMV spread in the field by other alternate hosts.