**Mechanical inoculation**

To take 10 ml of 100 mM phosphate buffer, pH 7.2 (Supplemented with 0.2% sodium sulphite and 0.01 M 2-mercaptoethanol) in a pestle and mortar on ice and 0.2% of celite (BDH545) and mercaptoethanol was added in the inoculums. Two weeks old fully expanded leaves (1g:10 ml) were dusted with carborandum on the upper leaves and inoculated by rubbing method with the help of cotton soaked with inoculums. After inoculation plants were kept for 30 minutes in the chamber while inoculums were dried, after inoculated plants were washed with distilled water and maintained under the greenhouse condition.

**Materials:**

Mortar pestle, ice flaks, Muslin cloth, Carborundum, 100mM Phosphate buffer, Celite, Beta mercaptoethonal, Sterile cotton, Hoagland solution or NPK 19:19:19

**Plant material:**

Three weeks old Nicotiana benthamiana, Nicotiana Tabacum, Nicotiana gultanicia plants