STUDIES ON RHIZOBIAL CROSS INOCULATION WITH SOME OF SPECIES OF *SESBANIA* AND A FEW SELECTED FOOD LEGUMES

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Unlike most leguminous plants, certain species of *Sesbania* produce nitrogen fixing nodules on their stems. This feature enables these plants to fix atmospheric nitrogen even in the presence of high levels of soil nitrogen (Dreyfus et. al., 1983). Furthermore, the ability of these species to grow under flooded conditions make them attractive as potential green manure in rice cultivation. The specificity of stem nodulating rhizobia is still an unanswered question. (IITA Report, 1983 & Dreyfus et. al., 1983). The present study was conducted to determine the nodulating ability of rhizobial isolates from roots of *S. sesban*, *S. aculeata*, green gram, black gram, ground nut, cow pea and soy bean on the stem and roots of *S. rostrata* and vice versa.

Isolates from *Sesbania* species did not nodulate the food legumes tested. Similarly, the isolates from food legumes did not nodulate *Sesbania* species. Furthermore, cross inoculations within *Sesbania* species also gave negative results. However, cross inoculation of rhizobia obtained from stem and root nodules of *S. rostrata* gave positive results.

These results indicate that rhizobia from *S. rostrata* are species specific and *S. rostrata* cannot be nodulated by rhizobia from other legumes tested.

09th Dec. 1987 (Wednesday) 02.00 p.m. - 02.15 p.m.