

**B-99: Effect of row arrangement of groundnut in combination with pigeonpea on foliar disease in the Eastern region**

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An experiment was conducted to study the effect of different row

arrangements of groundnut (*Arachis hypogaea*) and pigeonpea (*Cajanus cajan*) on foliar disease (leaf spot and rust) in groundnut. The experiment was laid out in Randomized Complete Block Design consisting of one sole crop (5 groundnut rows) and crop combinator of 2, 4, 6 and 8 rows of groundnut between 3 rows of pigeonpea on either side.

The crops were established and managed according to the recommendations, during the period December 1991 - May 1992.

There was a significant difference ( $P < 0.05$ ) in the percentage of leaves infected by rust disease (*Puccinia arachidia*) among the treatments. The rust infection was significantly lower ( $P < 0.05$ ) in 6 and 8 row groundnut arrangement than other arrangements. But there was no significant ( $P > 0.05$ ) difference among these 2 arrangements. The rust infection was higher in 2, 4 and sole groundnut arrangements.

The leaf spot disease (*Mycosphaerella arachidis*) was not significantly ( $P > 0.05$ ) influenced by row arrangement in this study.

In a groundnut-pigeonpea crop combination, the number of groundnut rows should be above 4 rows to minimize rust infection.