Screening of Peanut Genotypes for Resistance to Rust
(Puccinia arachidis) in Trinidad

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Two local and 28 imported genotypes of Arachis hypogaea were screened under field condition for resistance to Puccinia arachidis. The trial was conducted at the U.W.I. Field Station during the period May to September 1990. Genotypes were screened using the ICRISAT 9-point rust field score. Components of resistance (incubation period, pustule diameter, and number of pustules per 10 cm² leaf area) were assessed and the inter-relationship among the components of resistance and rust field score were determined.

Of 28 breeding lines obtained from ICRISAT, 13 which had rust field scores of 1-1.7 showed marked resistance to P. arachidis. Six of them had rust field scores of 2-4.3 and the rest (9) had rust scores of 5.7-8.7. The two locally obtained genotypes; Robut 33-1 and NC2 were highly susceptible to rust. Genotypes which are resistant to P. arachidis at ICRISAT were also resistant in Trinidad. All the components of resistance evaluated were significantly correlated. Except incubation period, which is negatively correlated, the rest are positively correlated with one another.