DIFFERENTIAL REACTION OF TWO BIOTYPES OF COWPEA APHID, *APHIS CRACCIVORA (KOCH)* TO COWPEA, *VIGNA UNGUICULATA (L)* WALP.

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ABSTRACT

Grain legume forms an important component in tropical cropping system. *Cowpea vigna-unguitulata (L)* Walp is the most important grain legume produced in Nigeria. *Aphis craccivera (Koch)* is the main aphid pest of cowpea. Cowpea aphid infests the crop at the seedling stage and causes direct damage to the plant by removal of plant sap. Yield is reduced and in extreme cases the plant is killed. An extensive survey was conducted in Nigeria to find out if the cowpea aphid occurred as different biotypes in nature. Aphid samples collected from different part of Nigeria were tested against the known cowpea aphid resistant varieties. One such sample collected on the International Institute of tropical Agriculture (IITA) farm during the dry season had a different reaction to cowpea varieties identified as resistant. They were designated as biotype “B”. Only the seeds of ICDN and GDN were available for screening against this biotype fifty-two highly resistant, 7 moderately resistant and 19 resistant varieties were discovered. During the experiment it was also observed that the rate of reproduction of biotype B was slower than that of biotype A. Biotype variation in aphids is defined as the ability of population within an aphid species to differently damage plant resistance sources, is a problem that needs to be immediately addressed. This is a common phenomenon in aphids and it is one of the most important phenotypic traits relevant to plant resistance to aphids (PRA).

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