

# **Response of two Growth Stages of Pepper to Different Population Densities of the Spiralling Whitefly, *Aleurodicus dispersus* Russell**

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## **Abstract**

The effect of artificial infestation of the spiralling whitefly, *Aleurodicus dispersus* Russell at 0, 1, 2, 3, 4 and 5 pairs on caged potted pepper (*Capsicum* spp.) plants at 2 weeks after planting (WAP), representing the nursery stage, and 6 WAP, representing the field stage, was studied in a screen house. Increasing insect density resulted in a corresponding increase in damage to the leaves, measured as leaf drop. Yield reduction was inversely proportional to the whitefly population, with highly significant correlation coefficients. For instance, yield reductions were 8.8 and 36.5% with 1 and 5 pairs of adult whitefly respectively at 2 WAP, and 7.5 and 32.1% with 1 and 5 pairs respectively at 6 WAP. The chlorophyll, sugar, ash, protein and crude fibre contents of the leaves decreased with increases in level of infestation, although infestation had no significant effect on the nutrient contents of the fruits. The significant impact of *A. dispersus* on vegetative growth, yields and chemical contents of leaves confirm it as an economic pest of pepper in Nigeria.

**Keywords:** SPIRALLING WHITEFLY; ALEURODICUS DISPERSUS; PEPPER; CAPSICUM SPP.; LA MOUCHE BLANCHE EN SPIRALE; ALEURODICUS DISPERSUS; PIMENT; CAPSICUM SPP.