

The Influence of the Trap Size for Flight Behavior of Greenhouse Whitefly in Greenhouse Cherry Tomatoes

Sung-Hee Moon, Jung-Joon Park, Mun-Il Ryoo¹ and Kijong Cho¹

Department of Agricultural Biology, Korea University,

¹Division of Environmental Science & Ecological Engineering, Korea University

The yellow sticky trap sampling was performed at two commercial greenhouses with cherry tomato in Buyeo, Korea. Adult whiteflies were sampled by two kinds of sizes of yellow sticky traps that rectangular in shape (9.6-by-16 and 4.8-by-8 cm, respectively), positioned at top canopy level (2m high from ground level). Traps were collected and replaced weekly. Autocorrelation analysis, which is based on the relative position of samples revealed the different spatial distribution patterns and the flight behaviors of whitefly by each trap size, was performed. Correlograms suggested the presence of single or multiple gradients within the trap size, which revealed the influence of trap size on the whitefly flight pattern in greenhouse cherry tomatoes.