

Effect of Drip and Furrow Irrigation Methods on *Bemisia tabaci* Populations in Cotton Fields

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Effects of drip and furrow irrigation and their application at three different levels, on *Bemisia tabaci* populations, were studied during the 1999 and 2000 growing seasons in Aydın, Turkey, with the objective of attaining water rates of 100% (full), 66% (2/3) and 33% (1/3) during irrigation periods. All plots were irrigated during four different phenological periods, *viz.*, blooming, boll setting, boll and 5–10% of boll open stage. The number of whitefly immatures was significantly greater in furrow-irrigated than in drip-irrigated plots in both 1999 and 2000 and there were significant differences found in the effect of the irrigation methods and their application levels as well. In all trials, the number of whitefly nymphs was the highest in the 33% (1/3) water supply with both drip and furrow methods.

KEY WORDS: Cotton; *Bemisia tabaci*; drip irrigation; furrow irrigation; population dynamics.

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