Objective: One of several foliar diseases for fresh, local organic and conventional tomato growers is Powdery mildew. Foliar diseases will reduce yield when not adequately controlled, infecting fruit, reducing production and fruit quality. Diseased crops are abandoned before the last harvest despite consumer demand. This project will provide some information for organic growers that are in need of biopesticides to better control foliar diseases.

Method: Seedlings were no-till transplanted on July 1. Applications of conventional fungicide were made weekly. The Kocide® rate was increased over time from lowest to highest label rate. Most other treatments were applied before diseases were expected to begin developing, based on crop physiology.

Results: Conditions were not ideal for tomato production in 2008. Companion® Biological Fungicide provided control of both Powdery mildew and Septoria leaf spot (*Lycopersicon*). Companion was more effective for Powdery mildew. Control obtained for Powdery mildew with the low rate (0.5 gal / acre) was 68 to 95%, based on leaflet assessments; higher values were obtained for canopy assessments.