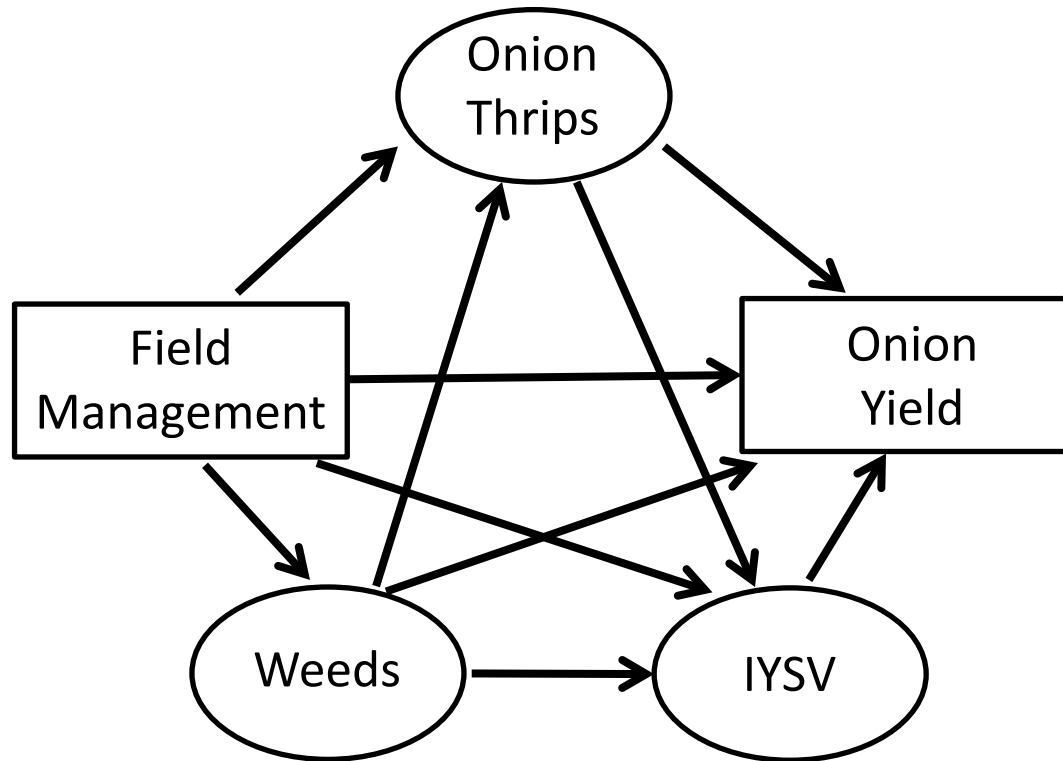


Drivers of Key Interactions

Crop rotation
Fertilizer (N) rate
Soil quality
Insecticide sprays
-Frequency
-Modes of action
Nearby crops
Volunteer onions
Cull piles
Weeds
-Within field
-Field edges
Weather



Key Parameters to Measure

Total yield
Marketable yield
Total soil N
Inorganic soil N
Soil microbial activity
Soil pH
Plant leaf number
Plant tissue N
Cumulative thrips
IYSV incidence
Weeds
-Diversity
-% cover

Fig. 1. Conceptual model of interactions among key components in a western U.S. onion production system. Previous research has helped define key factors that drive interactions, and important parameters to measure to elucidate interactions.