Table 1. Biological Control Systems and Pathogens That Are Currently Being Researched by Members of W-3147.

Contributing State	Target pathogen	Biocontrol agent
California-Riverside	*Meloidogyne* spp.	Suppressive soil; *Pochonia chlamydosporium*, *Purpureocillium lilacinum*
CA-Riverside	*Heterodera schachtii*	Suppressive soil, *Fusarium* spp., *Dactylella oviparasitica*
CA-Riverside	*Anguina*	azadirachtin
CA-Riverside and collaboration with Nebraska	*Heterodera glycines*	*Dactylella oviparasitica*
CA-Riverside and collaboration with ARS-WA	*Heterodera avenae*	*Dactylella oviparasitica*
CA-Riverside	*Candidatus* Liberibacter asiaticus	Mycorrizhal fungal phylotypes
Delaware	*Pseudomonas syringae* *Magnaporthe oryzae*	*Bacillus subtilis strain UD1022* *Pseudomonas chlorophis* *Pantoae sps.* Rice Microbiome
Illinois	*Rhizoctonia solani, Fusarium virgaliforme, Phialophora gragata, Sclerotinia sclerotiorum*	Cultural practices, cover crops
Kansas	*Macrophomina phaseolina* *Fusarium graminearum*	cover crops, tillage and cultivar selection, impact disease in wheat and soybeans.
Maryland	*Fusarium oxysporium* *Sclerotinia sclerotiorum*	Suppressive soils, *Coniothyrium minitans*
Maine	*Sclerotinia sclerotiorum*	*Coniothyrium minitans*, *Trichoderma* spp.
Maine	*Streptomyces scabies*, *Phytophthora erythroseptica*.	*Bacillus* spp., suppressive soil
Minnesota	*Streptomyces scabies* *Pythium, Phytophthora* *Fusarium*	*Streptomyces spp.*, suppressive soils, cultural practices
Mississippi	*Macrophomina phaseolina*	*Bacteria* spp., *Trichoderma* sp.
New Hampshire	*Pythium* spp. Powdery mildew	*Bacillus* spp. *Trichoderma* spp.
New Jersey		Endophytes, *Pseudomonas*, *Bacillus*, lipopeptides

Nebraska	*Heterodera glycines*	*Lysobacteria, Paenibacillus , Bacillus firmus, Pasteuria nishizawae*
New Mexico	*Verticillium dahliae Phytophthora capsici, Sclerotinia sclerotiorum*	Green manure and organic amendments, Seed and soil treatment with *Bacillus* and S*treptomyces* species
New York	*Meloidogyne hapla Fusarium, Rhizoctonia, Pratylenchus, Thielaviopsis* spp., *Meloidogyne hapla , Sclerotinia sclerotiorum*	Cultural practices, soil health assessment, *Bacillus subtilis, Gliocladium virens*, strain T22 of *Trichoderma harzianum* (Bioworks, NY), *Streptomyces* sp., mycoviruses
New York	*Phytophthora capsici*	cultural practices
Oregon	*Phytophthora* spp.	cultural practices, solarization, *Trichoderma* spp.
Washington	*Fusarium oxysporum spinaceae*	Pathogen detection, resistance
ARS-WA	*Pythium, Rhizoctonia, Gaeumannomyces, Heterodera, Fusarium*	Suppressive soils, *Pseudomonas* breeding for resistance, effect of direct-seeding (no-till) on development of suppressiveness, cultural practices (fallow, greenbridge control), effect of crop rotation on maintenance of suppressiveness. Influence of host plant genotype on population structure of biocontrol agent and other microbes
ARS-WA	*Macrophomina phaesolina Fusarium oxysporum fragariae*	Brassica seed meal amendments, anaerobic soil disinfestation