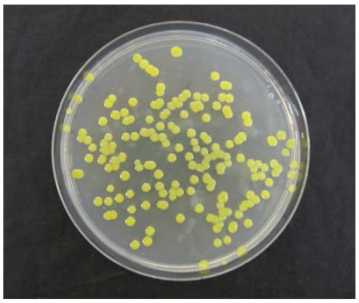
Plant Pathology Seminar Series



"Clonality and Recombination in the Globally Spread Bacterial Spot of Tomato and Pepper Pathogens"

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Bacterial spot of tomato and pepper is an important disease worldwide. Management of the disease is difficult as durable resistance is difficult to find in tomato germplasm and resistance to copper-based fungicide quickly develops in bacterial populations. In the early 2000s, research utilizing a global collection of strains suggests that four species cause the disease. These species were designated as *X. euvesicatoria, X. perforans, X. vesicatoria* and *X. gardneri.* However, diversity within each species was less studied. Recently, recombination between species was identified, with dramatic and unique recombination events in strains recovered from Nigeria. A much-expanded population studies from different countries identified different phylogenetic fate for populations from different countries, including the existence of unique recombination events followed by clonal spread. Monitoring of populations in Florida shows that different genetic groups have emerged for *X. perforans* since its first report in 1991. These findings suggest that management of this disease might need a redirection from known traditional methods. The possibilities of small molecule essential oils and their enhancement with surfactants were investigated, showing strong promise for disease management.

4:10 pm | September 19, 2022 | Plant Pathology 515, Fall 2022

Zoom Link: https://wsu.zoom.us/j/92547296820?pwd=c0wxKzJ0VnVjcUt3c3o4UlZ6ams3dz09

Meeting ID: 925 4729 6820 **Passcode:** 3911

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