APPLE STEM NETWORK PRESENTS

SCIENCE IN OUR VALLEY

WEDNESDAY

OCT 22

4 PM - 5 PM

IDENTIFYING LEAFHOPPER FEEDING AND COMMUNICATION BEHAVIORS TO DISRUPT TRANSMISSION OF THE X-DISEASE PHYTOPLASMA IN WASHINGTON CHERRIES

PRESENTED BY JACOB PITT,
POST DOCTORAL RESEARCH ASSOCIATE, WASHINGTON STATE UNIVERSITY

Free & Open to the Public

No Registration Required

Intended for 'Science-Based' Audience

Leafhoppers are insects that can transmit plant pathogens, causing a variety of diseases in many crops. In the Pacific Northwest, X-disease is leading to major reductions in cherry harvests. The disease is caused by a type of bacteria (phytoplasma) that is transmitted between cherry trees by leafhoppers, and pesticides are one of the few tools available to growers to control leafhoppers. More information on leafhopper feeding and communication behaviors will eventually lead to new and/or optimized management strategies, in addition to providing fundamental insights into leafhopper biology. Our research combines electropenetrography (EPG) and recording of substrate-borne vibrations to simultaneously monitor feeding and communication behavior of leafhopper vectors in the lab. We attempt to answer questions of: How long do leafhoppers have to feed on a plant to acquire the X-disease phytoplasma?; Which plants are leafhoppers most likely to acquire the phytoplasma from?; Do leafhoppers prefer to communicate on cherry trees or other types of host plants? In this seminar, I will discuss current findings and ongoing work that is being conducted.

SERIES CAN BE ATTENDED VIRTUALLY OR IN-PERSON

IN-PERSON LOCATION: WSU TREE FRUIT RESEARCH & EXTENSION CENTER

1100 N WESTERN AVE, WENATCHEE, WA 98801

MORE INFO: WWW.APPLESTEMNETWORK.ORG/SCIENCE-IN-OUR-VALLEY