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SAC Lanternfly Project Summary

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SAC Lanternfly Project Summary – John Pisciotta

The Spotted Lanternfly (SLF) is an invasive plant hopper native to China that feeds on grapes, fruit trees and various hardwoods. This exotic pest was first identified in Berks County, PA in 2014. Since then its spread has radiated into surrounding areas, devastating local crops and agriculture. The goal of this surveillance project was to locate, identify and map SLF’s preferred host-tree (Ailanthus altissima) in advance of a possible WCU infestation. The host tree, also a native of China, was imported into the US by Philadelphia botanists in the 1780s and it is known to exist within the Gordon Natural Area. An interactive GIS-based map of the host tree population was created using open source software. The map can provide for GPS-guided surveillance and eradication efforts as educational field components of sustainability-related courses. This will help safeguard sustainable biodiversity of the Gordon Natural Area. A second project goal was to map any lanternflies detected on campus. From April through mid-August no SLFs were detected. However, on August 21st, 2018, the first photographically verified SLF was documented at WCU in the Gordon Natural Area. The interactive map serves to document the verified sightings of spotted lanternfly to track the invasion. As of Fall, 2018 it has also been adapted to help guide volunteer surveillance and extermination efforts by students and community members. Results of this study documented the SLF and its host tree at multiple locations in the West Chester University Campus and within the Gordon Natural Area. Follow up research and actions shall be required to address the high potential for further SLF spread or damage to WCU trees and gardens.