

University of Maryland Budget Justification

Senior/Key Personnel: The principal investigator (PI, Dr. Nixon), will devote 0.24 calendar months (2% effort). As the PI, Dr Nixon will be responsible for administration and reporting duties. She will also plan and oversee all field and greenhouse aspects of the proposed project, including:

- Protocol management
- Study site selection in mid-Atlantic states
- Supervision of technicians
- Field data collection and eDNA/antDNA sample collection for objective 1
- Data collection for objective 2
- Data management

Other Personnel

Yet to be appointed: Two Technicians; 12 months each, for which \$45,375 each is requested. Technicians will assist in finding and selecting appropriate field sites for Objective 1, maintain plant materials for Objective 2, take the lead in field and greenhouse data collection for both objectives and assist with DNA sample collections for objective 1.

Fringe Benefits

Fringe benefit rates for the University of Maryland are 30.30% for faculty and 21.70% limited benefits of the salaries and wages base, and are identified specifically to each employee and charged individually as direct costs. The fringe benefits include FICA, Unemployment, Workers Compensation, Health Insurance, Retirement, Retirement Health, Terminal Leave, and the Employee Assistance Program. Tuition Remission is a UMD fringe benefit but is not included in the benefit rate calculation and is budgeted separately as applicable. Fringe benefits will be charged in accordance with the federally negotiated rate at the time the cost is incurred. These rates are currently being re-negotiated, by the cognizant government agency, Department of Health and Human Services. Fringe rates could be adjusted in future years.

Travel: Domestic travel funding is requested for Dr. Nixon and Technician to drive to biosurveillance research field sites for visual scouting, trap checks, and DNA sample collection. The field sites must be selected based on predicted 2027 spotted lanternfly densities, therefore mileage is estimated at an average of 140 miles per week to collect data at research sites for 7 months at \$0.725/mile (total \$2,842).

Out-of-state travel is requested in Year 1 for PI Dr. Nixon for attendance to the national Entomological Society of America Annual Meeting in Ohio to attend symposia on spotted lanternfly, eDNA techniques, and novel biosurveillance technologies. Additionally, Dr. Nixon will meet with other personnel on this project and other spotted lanternfly technical working group members (registration: \$750, estimated \$280 roundtrip mileage, \$180/night for 5 nights, \$85 per diem for 5 days; est. total \$2,335).

Other Direct Costs

Materials and Supplies - \$11,700

Objective 1: Funds are budgeted for \$3,200 for eDNA and ant DNA collection supplies, including hand rollers, vacuum hand pumps, molecular filter papers, falcon tubes, and centrifuge tubes; \$4,000 is also requested for chemicals to use in these protocol including sterile water and molecular grade ethanol. Supplies to make and maintain circle traps are requested (\$1,500). Objective 2: estimating \$20 per plant for 16 plants per treatment (8 treatments), plus pots, soil, and fertilizer (\$3,000).

Indirect Costs:

Due to a USDA Statutory cap, a non-profit's assessment of indirect costs is limited to no more than 10% of the project's total direct costs or the application of their indirect cost rate agreement, whichever is less.

Total Direct Costs: \$143,187

10% TDC: \$14,319

Total Project Costs: \$157,506