***Wolbachia* Project Supplies: QuickList**

(\* Obtain from *Wolbachia* Project)

**Lab 1: Arthropod Collection & Identification**

* (2) Arthropod collection containers (e.g., 25 ml Falcon tubes)
* (2) Student-collected arthropods
* (2) 1.5 ml tubes with ethanol
* (2) Nitrile gloves
* Safety goggles
* Transfer pipette
* Squirt bottle with 70% ethanol
* Dissection kit (bent probe/forceps)
* (2) Petri dishes
* Paper towels
* Computer or mobile device
* *Optional:* Dissecting microscope
* *Optional:* Macro lens

**Lab 2: DNA Extraction (Qiagen DNeasy Kit)**

**Equipment**

* Dry bath or water bath
* Vortex mixer
* Centrifuge

**Materials**

* (2) Nitrile gloves
* Squirt bottle with 70% ethanol
* Dissection kit (bent probe/forceps)
* (4) Petri dishes
* DI water
* Transfer pipette
* Rack for 1.5 ml tubes
* (4) Microtube pestles
* (12) 1.5 ml tubes
* 200 ul pipette & tips
* 1000 ul pipette & tips
* Waste cup for solids
* Waste cup for liquids
* Sharpie
* Box of Kimwipes

**Reagents**

* (2) Student-collected arthropods (Lab 1)
* (2) Arthropod controls \*
* Ethanol

**Qiagen DNeasy Kit (#69504) – kit includes:**

* Qiagen Buffer ATL
* Qiagen Proteinase K
* Qiagen Buffer AL
* Qiagen Buffer AW1
* Qiagen Buffer AW2
* Qiagen Buffer AE
* (4) Qiagen spin columns
* (4) Qiagen collection tubes

**Lab 3: PCR**

**Equipment**

* Thermal cycler
* Vortex mixer
* Centrifuge
* Mobile device

**Materials**

* (2) Nitrile gloves
* Squirt bottle with 70% ethanol
* (6) 0.2 ml PCR tubes
* Rack for PCR tubes
* (2) 1.5 ml tubes
* Rack for 1.5 ml tubes
* (1) Balance tube with 260 ul water
* Waste cup for tips
* 20 ul pipette & tips
* 200 ul pipette & tips
* Sharpie

**Reagents**

* (2) DNA from arthropods (Lab 2)
* (2) DNA from control arthropods (Lab 2)
* (+) DNA Control \*
* Sterile, nuclease-free water
* Taq Master Mix
* Wolbachia\_F primer \*
* Wolbachia\_R primer \*
* Arthropod\_F primer\*
* Arthropod\_R primer \*

**Lab 4: Gel Electrophoresis (MiniOne)**

**Equipment**

* MiniOne Electrophoresis System
* MiniOne Casting Stand with gel trays & comb
* Microwave
* Mobile device with camera

**Materials**

* (2) Gloves
* Squirt bottle with 70% ethanol
* 125 ml graduated cylinder
* Rack for PCR tubes
* Waste cup for tips
* 20 ul pipette & tips
* Sharpie
* *Optional:* Parafilm

**Reagents**

* (2) GreenGel cups, 1% TBE
* TBE running buffer
* DI water
* (6) PCR products (Lab 3)
* DNA Ladder

**Lab 5: Bioinformatics**

**Equipment**

* Computer with internet access