

Materials List for:

# Video Tracking Protocol to Screen Deterrent Chemistries for Honey Bees

Nicholas R. Larson<sup>1</sup>, Troy D. Anderson<sup>2</sup>

<sup>1</sup>Entomology, Virginia Tech

<sup>2</sup>Entomology, University of Nebraska-Lincoln

Correspondence to: Nicholas R. Larson at [nlarson@vt.edu](mailto:nlarson@vt.edu)

URL: <https://www.jove.com/video/55603>

DOI: [doi:10.3791/55603](https://doi.org/10.3791/55603)

## Materials

Name	Company	Catalog Number	Comments
50 mL Erlenmeyer flask	Kimax	26500-50	used for making the sugar/agarose cubes
Sugar	Kroger		any similar product will suffice
Deionized water			acquired in house
Agarose	Apex	20-102	used for making the sugar/agarose cubes
Mold for agarose cubes (Weigh Boat)			any mold that will provide the researcher with a 1.5 cm x 1.5 cm x 0.3 cm sugar/agarose cube will suffice
EthoVision XT	Noldus		visual tracking software
633 nm LEDs	Cyron	HTP904E	These lights were placed into a constructed light box to illuminate the arenas from below. The box was a simple wooden structure with a frosted plastic/plexi glass cover that allowed the light to disperse upwards without any glare.
Laptop or PC	Dell	Inspiron One 2305	necessary for video tracking software. Any pc device capable of running the visual tracking software will suffice
Bee Keeping protective clothing	Dadant & Sons Inc	V0126	any protective hood and jacket will suffice
Hive tool	Dadant & Sons Inc	M00757	used to open honey bee hive
Container for honey bees			any container suitable for housing and storing honey bees will suffice
Featherweight forceps narrow tip	Bioquip	4748	used to select individual honey bees
9 cm (diameter) Petri dish	Fisher Scientific	S01778	arena used to contain individual honey bees during video tracking
Recording Device (Camera)	Basler	acA-1300-60gm	any device that can record the subject clearly and transfer the file to a computer will suffice
GraphPad Prism	Graphpad		any statistical software package will suffice