

Materials List for:

# A Single-fly Assay for Foraging Behavior in *Drosophila*

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URL: <https://www.jove.com/video/50801>

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## Materials

Name	Company	Catalog Number	Comments
Apple Cider Vinegar	Spectrum		commercially available
Agarose, Type VII	Sigma-Aldrich	A0701	low gelling temperature agarose
Acrylic Testing Plate		custom	Plate contains 6 arenas. Each arena is 60 mm in diameter 6 mm in height. See testing plate diagrams for specific measurements.
LabVIEW V.8.5	National Instruments	776670-09	platform for programs: PositioningTool.vi, FlyTracking--Six Zones.vi NOTE: "elapsed time.vi", "time into file.vi", and "two object detect.vi" are included subroutines that must be available in order for the main data acquisition program "FlyTracking--Six zones.vi" to run.
LabVIEW Vision 8.5			
LabVIEW Vision Acquisition Software 8.5			
LabVIEW Vision Builder AI 3.5			
Igor Pro V.6	Wavemetric, Inc.		platform for macro: Data Analysis for Fly Tracking--Six Zones
Basler scA1390-17fm	National Instruments	779980-01	Digital Camera NOTE: driver for camera available at Baslerweb.com
8 mm lens	National Instruments	780024-01	Lens for Basler Digital Camera
Ground Glass Diffuser Plate	Edmund Optics	custom	Diffuses light, 25 cm x 30 cm
US Std. No. 100	Fischer Scientific	04-881X	Sieve with nominal opening of 150 μm
<b>Lighting Option 1</b>			
LED backlight 660 nm (20 cm x 20 cm)	Spectra West	BL47192	a simpler but more expensive lighting option.
Power Supply for LED Backlight	Spectra West		
<b>Lighting Option 2</b>			
660 nm LEDs	Superbrightleds	RL5R1330	Wavelength 660 nm (approximately 7 x 7 LED array for a 14.7 inch x 9.75 inch panel)
Linear DC Power Supply	GW Instek	GPS-1830D	Power supply for LED Panel
Solderless Breadboard	Digikey	922354-ND	Breadboard for LEDs