

Materials List for:

# Larval RNA Interference in the Red Flour Beetle, *Tribolium castaneum*

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## Materials

Name	Company	Catalog Number	Comments
Organic whole wheat flour	Heartland Mill Inc. Kansas	G1	
Brewer's yeast	MP Biomedicals	2903312	Sift yeast with #35 stainless sieve before use. Wear protective mask and cover the sieve with plastic wrap, as the sifted yeast is a fine particle and respiratory hazardous.
6 oz plastic <i>Drosophila</i> stock bottles	Fisher Scientific	11-888	
Sieve	Fisher Scientific	04-881N	8 in. dia. x 2 in.D. Use #25 (Nominal opening 710 µm) for larvae, pupae, and adults.
Sieve	Fisher Scientific	04 881 10P	8 in. diameter #35 (Nominal sieve opening: 600 µm) Stainless Steel Sieves, 8 in. dia. x 2 in.D. This sieve is ideal to remove clumps from yeast powder.
Sieve receiver	Fisher Scientific	04-866B	8 in. diameter
1.5 Quart spouted sample pan	Seedburo Equipment Co.	Model 33	collection pan
Incubator	BioCold Environmental Inc	BC26-IN	Keep it 30 °C with 70% humidity.
Na <sub>2</sub> HPO <sub>4</sub>	Fisher Scientific	S374500	
NaH <sub>2</sub> PO <sub>4</sub>	Fisher Scientific	S397-500	
KCl	Fisher Scientific	P217-500	
Food dye	Kroger		green, blue, or red preferable
Microscope glass slide	Fisher Scientific	22-038-103	
Tack-It Over&Over	Aleene's		Repositionable glue for sticky slides. Double sided tape can be used as an alternative, however, we found that the adhesiveness varies.
Plastic CD case	Amazon		
Borosilicate glass capillary	Sutter Instrument	BF100-50-15	O.D. 1 mm, I.D. 0.5 mm, 15 cm. Without filament
Needle puller	Sutter Instrument	P-87 or P-97	
Removable mounting putty	Loctite Fun-Tak		
Compressed gas duster	OfficeMax	OM96091	
Forceps	Fine Science Tool	11231-30	Dumoxel #3 (to manipulate beetles)
Forceps	Fine Science Tool	11252-20	INOX #5 (to break needle tips)
Ethyl ether, anhydrous	Fisher Scientific	E138-500	
Nylon mesh	Flystuff/Genessee Scientific	57-102	120 µm pore size/49% open area

Media bottle, 100 ml	VWR	89000-926	
Stereomicroscope	Zeiss		SteREO Discovery V12. Injection microscope.
Stereomicroscope	Fisher/Zeiss	12-070-513	Stemi2000. Use to break the needle and place larvae onto the sticky slide.
X-Y mechanical stage	Zeiss	4354600000000000	
X-Y mechanical stage	Microscopenet.com	A512	Inexpensive alternative
Manipulator	Narishige	M-152	
Magnetic stand	Narishige	GJ-1	
Glass capillary holder	Narishige	IM-H1	
30 ml Disposable syringe	BD syringe	309650	BD Luer-Lok Tip
Four-way stopcock	Cole-Parmer Instrument Co.	EW-30600-03	Stopcocks with Luer connections; 4-way; male slip
Art paint brush	Amazon	Art Advantage Oil and Acrylic Brush Set, 24-Piece	Any general paint brush will work.