

Materials List for:

Rearing the Fruit Fly *Drosophila melanogaster* Under Axenic and Gnotobiotic Conditions

Melinda L. Koyle¹, Madeline Veloz¹, Alec M. Judd¹, Adam C.-N. Wong^{2,4}, Peter D. Newell^{2,5}, Angela E. Douglas^{2,3}, John M. Chaston^{1,2}

¹Department of Plant and Wildlife Sciences, Brigham Young University

²Department of Entomology, Cornell University

³Department of Molecular Biology and Genetics, Cornell University

⁴Division of Infectious Diseases, Boston Children's Hospital, Harvard Medical School

⁵Biological Sciences, SUNY Oswego

Correspondence to: John M. Chaston at john_chaston@byu.edu

URL: <https://www.jove.com/video/54219>

DOI: [doi:10.3791/54219](https://doi.org/10.3791/54219)

Materials

Name	Company	Catalog Number	Comments
Brewer's Yeast	MP Biomedicals, LLC.	903312	http://www.mpbio.com/product.php?pid=02903312
Glucose	Sigma Aldrich	158968-3KG	http://www.sigmaaldrich.com/catalog/product/aldrich/158968?lang=en&region=US
Agar	Fisher--Lab Scientific	fly802010	https://www.fishersci.com/shop/products/drosophila-agar-8-100mesh-10kg/nc9349177
Welch's 100% Grape Juice Concentrate	Walmart or other grocery store	9116196	http://www.walmart.com/ip/Welch-s-Frozen-100-Grape-Juice-Concentrate-11.5-oz/10804406
Cage: 32 oz. Translucent Round Deli Container	Webstaurant Store	999L5032Y	http://www.webstaurantstore.com/newspring-delitainer-sd5032y-32-oz-translucent-round-deli-container-24-pack/999L5032Y.html
Translucent Round Deli Container Lid	Webstaurant Store	999YNL500	http://www.webstaurantstore.com/newspring-delitainer-ynl500-translucent-round-deli-container-lid-60-pack/999YNL500.html
Stock Bottles	Genesee Scientific	32-130	https://geneseeesci.com/shop-online/product-details/?product=32-130
Droso-Plugs	Genesee Scientific	49-101	https://geneseeesci.com/shop-online/product-details/?product=49-101
Nylon Mesh	Genesee Scientific	57-102	https://geneseeesci.com/shop-online/product-details/715/?product=57-102
Plastic Bushing	Home Depot	100404002	http://www.homedepot.com/p/Carlson-1-in-Non-Metallic-Terminal-Adapter-E943FR-CTN/100404002
Plastic Bushing Cap	Home Depot	100153897	http://www.homedepot.com/p/1-1-4-in-Rigid-Plastic-Insulated-Bushing-2-Pack-27529/100153897
Specimen Cup	MedSupply Partners	K01-207067	http://www.medsupplypartners.com/covidien-specimen-containers.html
Repeater M4	Eppendorf	4982000322	https://online-shop.eppendorf.us/US-en/Manual-Liquid-Handling-44563/Dispensers--

			Burettes-44566/Repeater-M4-PF-44619.html
50 ml Centrifuge Tubes	TrueLine Centrifuge Tubes	TR2003	https://www.lpsinc.com/Catalog4.asp?catalog_nu=TR2003
Food Boxes	USA Scientific	2316-5001	http://www.usascientific.com/search.aspx?find=2316-5001
Lysing Matrix D Bulk	MP Biomedicals, LLC.	116540434	http://www.mpbio.com/search.php?q=6540-434&s=Search
Filter Pipette Tips, 300 µl	USA Scientific	1120-9810	http://www.usascientific.com/search.aspx?find=1120-9810
Petri Dishes	Laboratory Product Sales	M089303	https://www.lpsinc.com/Catalog4.asp?catalog_nu=M089303
Ethanol	Decon Laboratories, INC.	2701	http://www.deconlabs.com/products.php?ID=88
Paintbrush	Walmart	5133	http://www.walmart.com/ip/Chenille-Kraft-5133-Acrylic-Handled-Brush-Set-Assorted-Sizes-colors-8-Brushes-set/41446005
Forceps	Fisher	08-882	https://www.fishersci.com/shop/products/fisherbrand-medium-pointed-forceps-3/p-128693
Household Bleach (6-8% Hypochlorite)	Walmart	550646751	http://www.walmart.com/ip/Clorox-Concentrated-Regular-Bleach-121-fl-oz/21618295
Universal Peptone	Genesee Scientific	20-260	https://geneseesci.com/shop-online/product-details/?product=20-260
Yeast Extract	Fisher Scientific	BP1422-500	https://www.fishersci.com/shop/products/fisher-bioreagents-microbiology-media-additives-yeast-extract-3/bp1422500?matchedCatNo=BP1422500
Dipotassium Phosphate	Sigma Aldrich	P3786-1KG	http://www.sigmaaldrich.com/catalog/search?term=P3786-1KG&interface=All&N=0&mode=match%20partialmax&lang=en&region=US&focus=product
Ammonium Citrate	Sigma Aldrich	25102-500g	http://www.sigmaaldrich.com/catalog/search?term=25102-500g&interface=All&N=0&mode=match%20partialmax&lang=en&region=US&focus=product
Sodium Acetate	VWR	97061-994	https://us.vwr.com/store/catalog/product.jsp?catalog_number=97061-994
Magnesium Sulfate	Fisher Scientific	M63-500	https://www.fishersci.com/shop/products/magnesium-sulfate-heptahydrate-crystalline-certified-acs-fisher-chemical-3/m63500?matchedCatNo=M63500
Manganese Sulfate	Sigma Aldrich	10034-96-5	http://www.sigmaaldrich.com/catalog/search?term=10034-96-5&interface=CAS%20No.&N=0&mode=match%20partialmax&lang=en&region=US&focus=product

MRS Powder	Sigma Aldrich	69966-500G	http://www.sigmaaldrich.com/catalog/product/sial/69966?lang=en&region=US
96 Well Plate Reader	BioTek (Epoch)	NA	http://www.biotek.com/products/microplate_detection/epoch_microplate_spectrophotometer.html
1.7 ml Centrifuge Tubes	USA Scientific	1615-5500	http://www.usascientific.com/search.aspx?find=1615-5500
Filter Pipette Tips, 1,000 µl	USA Scientific	1122-1830	http://www.usascientific.com/search.aspx?find=1122-1830
96 Well Plates	Greiner Bio-One	655101	https://shop.gbo.com/en/usa/articles/catalogue/article/0110_0040_0120_0010/13243/
Ceramic Beads	MP Biomedicals, LLC.	6540-434	http://www.mpbio.com/product.php?pid=116540434
Tissue Homogenizer	MP Biomedicals, LLC.	116004500	http://www.mpbio.com/product.php?pid=116004500
Class 1 BioSafety Cabinet	Thermo Scientific	Model 1395	http://www.thermoscientific.com/en/product/1300-series-class-ii-type-a2-biological-safety-cabinet-packages.html