

Materials List for:

# Gamete Collection and In Vitro Fertilization of *Astyanax mexicanus*

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## Materials

Name	Company	Catalog Number	Comments
1.5 mL Centrifuge Tube	Eppendorf	#22364111	
100 mm Petri Dishes	VWR International	#25384-302	
Aspirator Tube	Drummond	#2-000-000	
Calibrated 1-5 µL Capillary Tubes	Drummond	#2-000-001	
Dispolable Spatulas	VWR International	#80081-188	
HMA-50S 50W Aquatic Heaters	Finnex	HMA-50S	
P1000 Pipette	Eppendorf	#3123000063	
P1000 Pipette Tips	Thermo Scientific	#2079E	
Sanyo MIR-554 incubator	Panasonic Health Care	MIR-554-PA	
Sperm Extender E400			130 mM KCl, 50 mM NaCl, 2 mM CaCl <sub>2</sub> (2H <sub>2</sub> O), 1 mM MgSO <sub>4</sub> (7H <sub>2</sub> O), 10 mM D (+)-Glucose, 30 mM HEPES Adjust to pH 7.9 with 5M KOH and filter sterilize. Solution can be stored at 4 °C for up to 6 months.
Sponge Animal Holder			Made from scrap foam
System Water			Deionized water supplemented with Instant Ocean Sea Salt [Blacksburg, VA] to reach a specific conductance of 800 µS/cm. Water quality parameters are maintained within safe limits (Upper limit of total ammonia nitrogen range, 1 mg/L; upper limit of nitrite range, 0.5 mg/L; upper limit of nitrate range, 60 mg/L; temperature, 22 °C; pH, 7.65; dissolved oxygen 100 %)
Tissue Wipes	Kimberly-Clark Professional	#21905-026	
ZIRC E2 Embryo Media			15 mM NaCl, 0.5 mM KCl, 1.0 mM MgSO <sub>4</sub> , 150 µM KH <sub>2</sub> PO <sub>4</sub> , 50 µM Na <sub>2</sub> HPO <sub>4</sub> , 1.0 mM CaCl <sub>2</sub> , 0.7 mM NaHCO <sub>3</sub> . Adjust pH to 7.2 to 7.4 using 2 N hydrochloric acid. Filter sterilize. Stored at room temperature for a maximum of two weeks.