

The Nature of Embryo Development In the Tubatrix Aceti (Vinegar Eels)

<p align="center">Materials</p> <p>Available from Region 20 Living Science Materials Center</p>	<p align="center">Enrichment Activity</p>
<p>LM-67 Distilled Water LM-14 Vinegar Eels</p>	<p>Procedure</p> <ol style="list-style-type: none"> 1. Prepare a 0.2% solution of neutral red powder stain by dissolving 0.2% of powder stain in 1ml of alcohol and adding 99ml of distilled water. 2. Place a drop of vinegar eel medium on a slide. 3. Add a drop of stain solution to the drop of vinegar eels and cover with cover slip. If the animals are still moving too vigorously for observation, it will be necessary to slow them further by withdrawing the solution. The animals should be watched at the same time to be certain that only enough moisture is withdrawn to stop movement of large mature animals. If all solution is removed, the large animals will become distorted in structure. <p>Observations and Questions</p> <p>A mature male is slightly smaller than the mature female. Developing eggs and young worms can be observed readily inside the body of the female. Observe several of the mature worms.</p> <ol style="list-style-type: none"> 1. In which position, anterior or posterior, are the most mature embryos located? 2. In which numbered stage is the development of muscles nearing completion? How are you able to determine this? 3. In which stage are the mouth and tail regions first observed? <p>If you study several slides over a period of 15 minutes or longer, most likely you will observe a young worm in the process of emerging from the body of the adult female.</p> <ol style="list-style-type: none"> 4. Through what portion of the adult body does the young worm emerge? 5. Does it appear that the adult expels the young worm or does the young animal seem to search for a place of escape? Describe your observations. 6. Is the embryo encased in a capsule before birth? If so, is the capsule shed before birth? 7. Does the young animal become uncoiled before or after leaving the body of the adult? 8. What is the length of the newly born worm in comparison to the length of the adult?
<p>Not Available from Region 20 Living Science Materials Center</p>	
<p>Red powder stain Alcohol Microscope slides (welled) and cover slips</p>	