

Isopod Habitat Preference

Isopods (roly-polies) are a type of arthropod that responds to moisture, temperature, and light. Listed below are a set of experiments in which students can observe the behavior of isopods under modified and adverse conditions.

Moisture Response Experiment: Choice studies can be conducted to see if isopods prefer damp or dry conditions.

Question: Are roly-polies attracted to dampness?

Hypothesis: If we offer, roly-polies a choice between damp and dry, they will choose damp.

Materials and Methods: Take a petri dish and place a moist filter paper on one side of the dish and a dry piece of filter paper on the opposite side. Place an isopod in the center of the petri dish and record at various time intervals which side of the petri dish the isopod is on. Remember to place only one roly-poly per petri dish because they influence one another's behavior when together. It is important to replicate so setup several petri dishes, keeping in mind that each petri dish represents a replication.

Results: Your results are a description of your roly-poly's behavior during the experiment and its location (damp or dry) at the end of the experiment. Record your results at 5 minutes, 15 minutes, 30 minutes, 1 hour (table provided)

Conclusion: If offered a choice between damp and dry, roly-polies will almost always choose damp. The prediction is confirmed or rejected.

Roly Poly Experiment (5 min)	Moist	Dry
Rep		
1		
2		

3		
4		
5		
6		
Mean Number		
Percentage		

Roly Poly Experiment (15 min)	Moist	Dry
Rep		
1		
2		
3		
4		
5		
6		
Mean Number		
Percentage		

Roly Poly Experiment (30 min)	Moist	Dry
Rep		
1		
2		

3		
4		
5		
6		
Mean Number		
Percentage		

Roly Poly Experiment (60 min)	Moist	Dry
Rep		
1		
2		
3		
4		
5		
6		
Mean Number		
Percentage		

