Tested Studies for Laboratory Teaching
Proceedings of the Association for Biology Laboratory Education
Vol. 35, 89, 2014

Comparison of Aerobic Respiration Rates in *Zophobas morio* larvae and Germinated Pea (*Pisum sativum*) Seeds Using Oxygen Sensors

William V. Glider

University of Nebraska - Lincoln, School of Biological Sciences, Lincoln NE 68588 USA
(**wglider1@unl.edu**)

This exercise used insect (*Zophobas morio*) larvae and Pea (*Pisum sativum*) seeds to investigate the similarities and differences between aerobic respiration rates of an ectothermic animal compared to the aerobic respiration rates of ectothermal plant seeds in various stages of germination. In addition, students investigated the effect of temperature on rates of aerobic respiration of both organisms. Respiration rates were measured and analyzed using a Vernier™ oxygen sensor, Lab Pro data logger, and Logger Pro 3 software linked to a computer. Students also explored the relationship between whole organism aerobic respiration and aerobic cellular respiration. This lab exercise has been used primarily in an introductory biology lab for mixed-majors and non-majors using a directed inquiry approach.

Mission, Review Process & Disclaimer

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Citing This Article

Glider, W.V. 2014. Comparison of Aerobic Respiration Rates in *Zophobas morio* larvae and Germinated Pea (*Pisum sativum*) Seeds Using Oxygen Sensors. Page 89 in *Tested Studies for Laboratory Teaching,* Volume 35 (K. McMahon, Editor). Proceedings of the 35th Conference of the Association for Biology Laboratory Education (ABLE), 477 pages.
http://www.ableweb.org/volumes/vol-35/?art=5