



# Biology @ Acadia

## MONITORING SYSTEM FOR RED-STRIPED FIREWORM, *AROGA TRIALBAMACULELLA* CHAMBERS, 1875 (LEPIDOPTERA: GELECHIIDAE) AND OTHER PEST SPECIES FOUND IN NOVA SCOTIAN BLUEBERRY FIELDS

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The red-striped fireworm (RSF) is a pest of low-bush blueberries in Nova Scotia. The objective of the study was to evaluate a putative sex-attractant monitoring system for red-striped fireworm. In addition, biodiversity of three groups of potential pest insects: froghoppers (Cercopidae), leafhoppers (Cicadellidae), and flea beetles (Chrysomelidae) was assessed in sweep samples from four-trapping fields. Putative attractants were tested singly and as blends, along with solvent controls. Trapping and sweep samples were collected between 15 June 2012 and 25 July 2012. Trapping did not produce a significant result for a specific attractant from the odorant combinations tested. For sweeps, two flea beetle species (*Mantura chrysanthemi* and *Altica sylvia*), 15 leafhopper species, and three froghopper species (*Philaenus spumaris*, *Lepyronia quadragularius*, and *Clastophora saintcyri*) were isolated. In addition, sampling effort was evaluated to determine effort needed to yield population and biodiversity estimates.



**Matthew Nunn** graduated from Central Kings Rural High School in Cambridge, N.S., Canada in 2009. He is currently completing his Honours thesis and is in his 4th year in Biology at Acadia. Matt has been on the Dean's List for each of his three years at Acadia and received a Natural Sciences and Engineering Research Council of Canada (NSERC) Undergraduate Student Research Award to conduct his study. While at Acadia, Matt has also been a member of the varsity soccer team and is a four-time Academic All-Canadian. He has also participated in many campus programs, such as SMILE (Sensory Motor Instructional Leadership Experience), Acadia Global Medical Brigades, Breakthrough Athletics, Relay for Life, WITS (Walk Away, Ignore, Talk it Out, and Seek Help), and is a Kings County Special Olympics Swim Team coach. He hopes to continue his education and pursue medicine after graduating.

