

Development of semiochemical attractants, lures and traps for raspberry beetle, *Byturus tomentosus* at SCRI – from fundamental chemical ecology to testing IPM tools with growers

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Abstract: Raspberry beetle adults are attracted to flowers of their hosts primarily by colour and odour (floral volatiles). SCRI scientists have investigated this chemical ecology interaction for several years, using a multi-disciplinary approach involving phytochemistry, insect behaviour, and GC-EAG electrophysiology. We will present a historical overview, explaining how these techniques have allowed us to identify the key flower attractants from a complex mixture of volatiles emitted by raspberry flowers and then go on to explain how recent (EU, HDC) and current (Hortlink) work has progressed the optimization of raspberry beetle traps for growers. We will explain how we are developing and testing slow release lures and different trap designs, together with collaborators at East Malling Research, Natural Resources Institute, Agrisense Ltd and also with Norwegian scientists, testing prototype traps on organic soft fruit farms.