MAJOR VOLATILES OF THE DEFENCE SECRETION OF CORIDIUS JANUS

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Coridius janus (Fabricius) a pest living on sweet pumpkins (Cucurbetacea) has a remarkable ability of survival among its predators. Our investigations revealed that this pest, when disturbed releases from lower part of its abdomen, a secretion having a characteristic smell. This secretion was also found to have some insecticidal properties.

Chemical analysis of this secretion indicated the presence of Carboxylic acids. After removing acids the neutral portion was analysed by GLC (10% OV101, FID) and two major volatiles were shown with some minor compounds. These two major compounds were isolated and identified to be trans 2-hexenal[2] and tridecane[3]. The result is in accordance with the previous findings on the defence secretion of pentotomidae[4]. Toxic effects of 2-hexenal[5] is thought to be the major factor responsible for the insecticidal properties of this defence secretion

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