Secondary Metabolites and Insecticidal Activity of Anemone pavonina

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The insecticidal properties of the crude extracts of the leaves and flowers of *Anemone pavonina* were evaluated on *Pheidole pallidula* ants and showed significant levels of activity. Bioassay-guided fractionations led to the isolation of the butenolide ranunculin (1) as the active principle. Chemical investigations of the extracts showed them to contain as major components the sitosterol glycopyranoside lipids 2–5 and the glycerides 6–8. The structures of the metabolites were elucidated, following acetylation and hydrolysis of the natural products, by interpretation of their NMR and mass spectral data. The uncommon lipid metabolites 2–8 were isolated for the first time from the genus *Anemone* and this is the first report

of insecticidal activity of the *Anemone* metabolite ranunculin against ants.

Key words: Insecticidal Activity, Anemone pavonina, Pheidole pallidula