

## Identification and chemical characterization of cuticular hydrocarbons in *Nezara viridula*

Sole M.<sup>(1)</sup>, Peri E.<sup>(1)</sup>, Colazza S.<sup>(1)</sup>, Saiano F.<sup>(2)</sup>, Alonzo G.<sup>(2)</sup>.

<sup>(1)</sup> Dipartimento S.En.Fi.Mi.Zo. Università degli Studi di Palermo, Viale delle Scienze 13, 90128 Palermo, e-mail: sole@unipa.it

<sup>(2)</sup> Dipartimento I.T.A.F. Università degli Studi di Palermo, Viale delle Scienze 13, 90128

Chemical communication is widely used by insects, relying on substance produced in numerous exocrine glands, and often released by the correspondingly well defined structures of cuticle. Hydrocarbons are widely studied cuticular components of insects. They are present on all insect cuticles, and can be composed of more than 100 different components.

Solid-phase micro extraction (SPME) is an easy solventless and largely used technique to concentrate and detect organic component present on different matrix. For these reasons we used a polydimethylsiloxane 100 µm fiber (PDMS) to isolate by rubber the cuticular hydrocarbons of pronoto and laminar expansion of pronoto of preoviposition females of *Nezara viridula*. The components collected on SPME successively were analyzed by gas chromatography with mass spectrometry detector. Our results didn't show different between pronoto and laminar expansion of pronoto. Identification of different compounds are actually in progress. Any of these compounds are related to long chain hydrocarbons (C<sub>30</sub> and C<sub>40</sub> both linear and ramified).