Acaricidal activity of marine organisms to the cattle tick : *Boophilus microplus*

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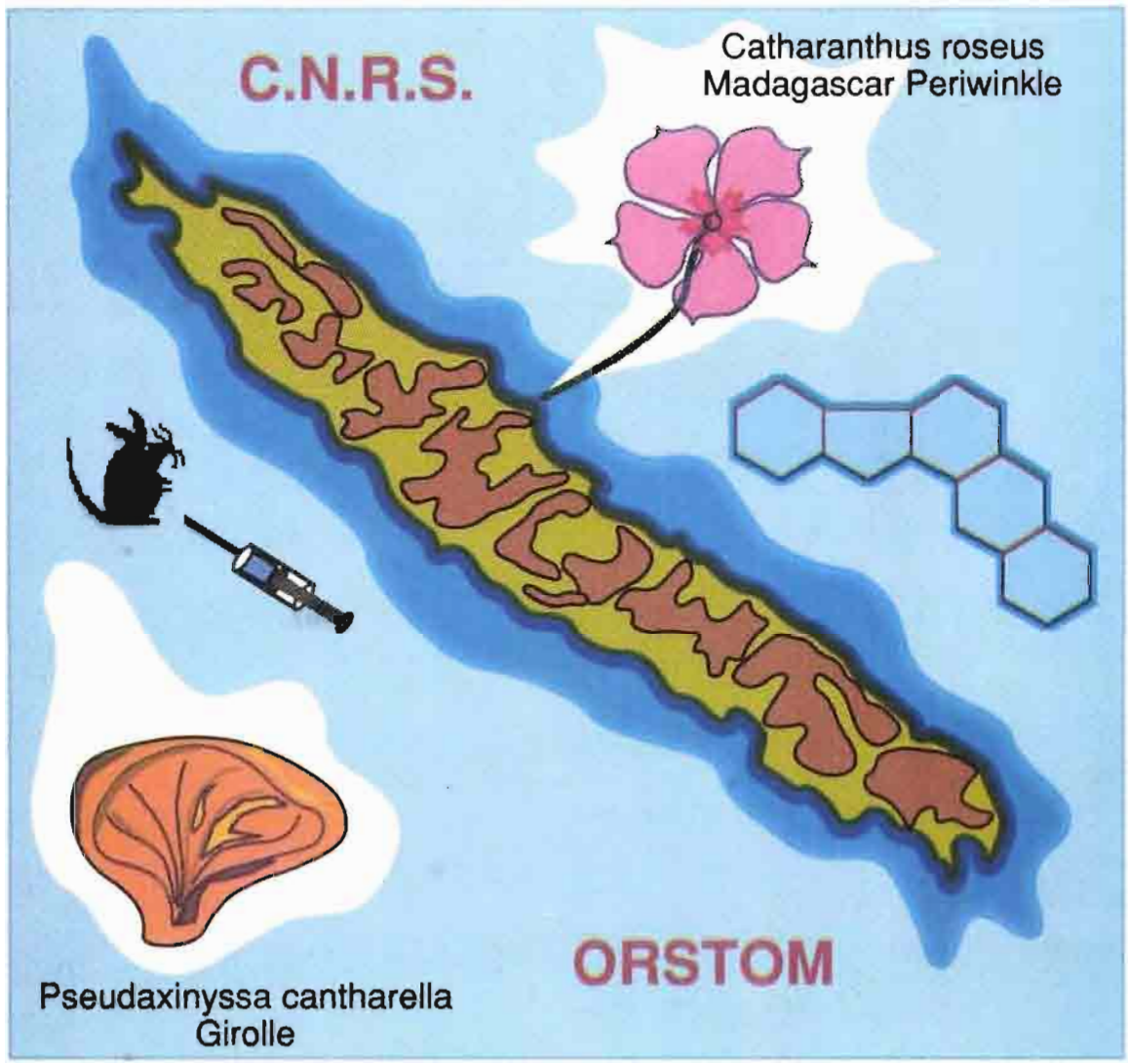
Boophilus microplus is the most important tick species in New Caledonia. It is responsible for physical damage to livestock, sometimes leading to paralysis or death of animals, it can also transmit various serious desease. In New Caledonia as in most countries *B. microplus* is control ed by regular dipping of cattle in insecticides. This species has demonstrated the widest spectrum of resistance to acaricides in all continents and in New Caledonia the first case of resistance was experienced in 1983 (BRUN *et al.*) following control failure.

As part of the SMIB programme (Substances Naturelles d'Intérêt Biologique) acaricidal activity of extracts made from 150 organismes was studied during the last three years. Samples were collected in the new Caledonian lagoon as well as in blue water, between 300 and 700 meters deep, mainly by draggings.

A simple method derived from Stone and Haydock (1962) was developed to screen biological activities of dried freeze organismes using larvae, the most susceptible cattle tick stage, for toxicity assessment.

Most of the active compounds were found among sponges and gorgonians.



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