MOVEMENT AND INTERACTION OF TWO EXOTIC CRAYFISH (*Pacifastacus leniusculus* AND *Procambarus clarkii)* USING PIT TELEMETRY IN EXPERIMENTAL CONDITIONS

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ABSTRACT

The coexistence of two exotic crayfish species (*Procambarus clarkii* and *Pacifastacus leniusculus)* was observed in a stretch of Rio Maçãs (Douro basin, Northeast of Portugal).

The red swamp crayfish, *Procambarus clarkii,* a sub-tropical species, was first detected in 1979 in Rio Caia (Alentejo) and from there rapidly spread through most freshwater bodies. This species is extremely resistant to severe climatic conditions, living in such contrasting environments as South or Northeast streams of Portugal.

The signal crayfish, *Pacifastacus leniusculus*, a cold-water crayfish recently reached Portuguese waters and is now spreading in Rio Maçãs.

To characterise movements, activity patterns and interactions of both species an experiment was developed in a confined area using PIT telemetry equipment with a multi-point decoder unit connected to eight circular panel antennae. Data were collected from sympatric tagged populations monitored during several days, to detect interactions between individuals during night and day.