

COLONIZATION OF RIVER MAÇÃS (NORTH PORTUGAL) BY TWO EXOTIC CRAYFISH, *Pacifastacus leniusculus* AND *Procambarus clarkii*

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ABSTRACT

In Portugal there was only one European species, the white clawed crayfish, *Austropotamobius pallipes*. During the last decades, a sharp regression of these populations took place and the species is presently considered extinct in Portugal.

Coming from Spain, two American species invaded the Portuguese freshwaters. The red swamp crayfish, *Procambarus clarkii*, a sub-tropical species, extremely resistant to severe climatic conditions, is actually present in almost inland waters. The signal crayfish, *Pacifastacus leniusculus*, a cold-water crayfish, reached recently the streams of NE Portugal and presently occurs in a sector of Rio Maçãs with approximately 43 km length.

Progression of the two exotic species in Rio Maçãs was followed every year since 2000.

The average velocity of propagation of signal crayfish from dispersion point is 2 km/year, although a great variability between sampling points was observed. Signal crayfish is well adapted to local stream conditions. Coexistence of signal and red swamp crayfish was detected in part of the river system.