

# BOCAGIANA

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## NEW RECORD OF *OTALA (OTALA) LACTEA* (MÜLLER, 1774) MOLLUSCA, GASTROPODA IN MADEIRA

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With 1 figure

*ABSTRACT.* The author gives a new record of the presence of *Otala lactea* (MÜLLER, 1774) in Madeira Island, as also some comments on the previous references of the presence of this species in this island.

*RESUMO.* A autora regista a observação recente de *Otala lactea* (MÜLLER, 1774) na Ilha da Madeira. É feita uma análise dos registos prévios desta espécie para a Ilha da Madeira.

### INTRODUCTION

The archipelago of Madeira has a significant number of terrestrial molluscs with a high (more than 60%) percentage of endemic species (WALDÉN, 1983; ABREU 1995). Most of the species have a restricted distribution intra-archipelago existing some examples of

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endemic species restricted to very small areas, like, for example, *Discula (Hystricella) turricula* (LOWE, 1831) known only from Ilhéu de Cima, a small islet near Porto Santo.

Most of the recent introductions of terrestrial molluscs in Madeira seemed to have an anthropogenic origin, this is the case of *Helix aspersa* (MÜLLER, 1774). This species is now well established even if restricted to humanized areas. In other situations there are records of the presence of certain species but restricted to a limited period of time. This seems the case of *Otala lactea* that was first recorded for Madeira by NOBRE (1931) as living near Praia Formosa (West of Funchal). All the subsequent records of this species for Madeira are a simple reproduction of Nobre's observations. During the last six years and in different field work, we tried to confirm the presence of *Otala lactea* in the area given by NOBRE (1931) nevertheless without any success.

### DISTRIBUTION AND HABITAT

*Otala lactea* has as main distribution area the South of Spain, Portugal, Balears, Morocco and Algeria (R. TUCKER ABBOTT, 1989).

It is a species that lives most commonly on limestone rocks, castel walls, on plants like *Opuntia*. It is also found on fields with dense vegetation, and in some cases in agricultural fields.

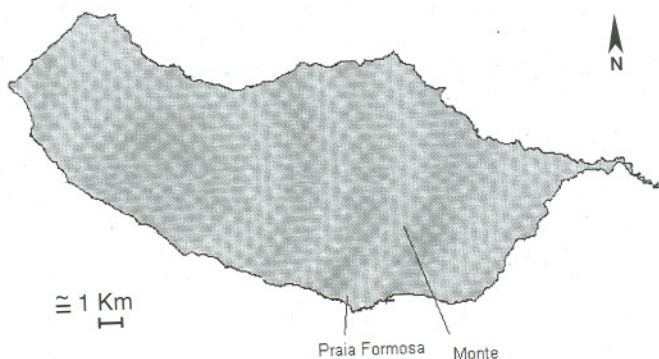


Fig. 1 - Legend: Record sites of *Otala lactea* in Madeira Island.

### MATERIAL

Recently (AUGUST, 1997) we had the opportunity to find a living population of *Otala lactea* in the surroundings of Monte, on the vicinity of Funchal. This place is located at 600 m altitude and quite far in relation with Praia Formosa (Fig.1). The main vegetation at the finding site is composed of introduced forest (*Acacia*, *Pinus*, *Eucaliptus*), but *Otala*

*lactea* seems to be restricted to the small spots of domestic agriculture. The climatic conditions at Monte are very different from those of Praia Formosa. Monte is a place with a high level of humidity and the average temperature is about 2 degrees less than near the sea. This means that this new population results from a separate introduction, and probably related with the use of agricultural plants coming from outside of Madeira.

## DISCUSSION

As it is expected, the introduction of new species in Madeira, namely of terrestrial molluscs, must be considered as a continuous possibility. In this particular case, it seems, and despite being restricted to the vicinity of human activities, that can be a starting point for a real introduction of this species in the natural habitats. This situation can bring negative consequences. In one side it is a non indigenous species that will be in competition with the endemic and indigenous species and also it can become an agricultural pest with economic consequences.

The introduction of exotic species, particularly in small islands, requires continuous monitoring in order to prevent any of the situations referred above.

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