

Reproduction of *Helix albescens* Rossmässler, 1839 (Pulmonata, Helicidae) in captivity

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Some aspects of laboratory rearing and spawning of *Helix albescens* from south-western part of the Crimea have been studied for the first time. Data on reproduction cycle, spawning, and egg survival are presented. The results are preliminary but may be useful for the protection of natural populations and cultivation of *H. albescens* in the Crimea.

Изучение размножения *Helix albescens* Rossmässler, 1839 (Pulmonata, Helicidae) в экспериментальных условиях

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Впервые в экспериментальных условиях изучены некоторые аспекты репродуктивного поведения и размножения *Helix albescens* из юго-западной части Крыма, в частности: сроки и продолжительность репродуктивного цикла, эффективность и интенсивность размножения производителей, процесс откладки яиц и их выживаемость, индивидуальная абсолютная плодовитость и т.п. Полученные результаты, несмотря на их предварительный характер, будут полезны как в плане организации природоохранных мероприятий, так и разработки биотехнологии выращивания *H. albescens* в Крыму.

INTRODUCTION

Like some other representatives of the genus *Helix*, the species *Helix albescens* is well known as a "grape snail". It belongs to edible species of great commercial interest. *H. albescens* is inadequately studied in comparison with relative species from Western and Central Europe. This species is known to occur in steppes and foothills; its geographical distribution is closely connected with the Black Sea region and may be designated as circumponatal. The range extends from Turkey to the North Caucasus and Georgia, including Bulgaria, Romania, southern regions of the Ukraine and the Crimea [Pusanov, 1925, 1926; Likharev, Rammelmeier, 1952; Schileyko, 1978]. The available literature contains no data on biology, life cycle, intraspecific structure, and ecology.

In recent years, these snails are intensively

collected in many areas, including the Crimea, due to high commercial importance and steady demand at the international market [Bonnet et al., 1990]. This may lead to a dramatic decrease in the snails stocks, even to a complete extinction of this species. Such situation occurred in populations of *Helix pomatia* from Poland greatly affected by a large-scale export to France and other Western European countries after the Second World War [Urbanski et al., 1983].

Under this circumstances the survival of natural populations and the rational exploitation of *H. albescens* acquire scientific importance. This relevant problem is assumed to be successfully solved on the basis of basic bioecological researches that combine population and biocenotic ecosystem approaches. On the other hand, the results of investigations can be applied to the cultivation of snails.