Part 28
Benthic, Shelled Gastropods

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*Cyphoma gibbosum* on a seafan in the coral reef of Parque Nacional Cahuita, Caribbean of Costa Rica (Photo: Jorge Cortés)
Abstract  Here we present a compilation of 1,198 benthic, shelled gastropod (prosobranch and pulmonate) species records from Costa Rica published in the scientific literature. Of these, 389 species are from the Caribbean and 818 from the Pacific; 9 species are common to both coasts. In terms of families, the Caribbean has 63, while the Pacific has 75. Including a list of 84 unpublished species (identified by specialists), the total of benthic, shelled gastropods for Costa Rica is 1,282, and the number of species from the Pacific coast increases to 902. Compared to a study of Colombia’s Caribbean coast, our list includes 60% of the species reported there, but only 31% of the 2,682 species reported for the Panamic province. The difference in species number between the Caribbean and Pacific of Costa Rica may be due to several facts, including the length of the coast (the Caribbean coast is five times shorter), number of expeditions (many more on the Pacific), and difference in coastal morphology (the Caribbean less complex). Compared to other areas, Costa Rica has lower species numbers, which may be due to patchy sampling (mostly in shallow waters with few samples from deeper than 100 m), and to the study of only macromolluscs. All of this indicates that more sampling is needed on both sides of Costa Rica and in the other Central American countries.

Introduction

Molluscs are the second most specious group of invertebrates in the world, and three fourths of them are gastropods (Morton 1960; Ruppert & Barnes 1994). Mollusc collecting has been popular for centuries, and amateurs have contributed significantly to the advancement of mollusc studies. There are immense collections both in museums and in private hands. Molluscs are also important as food source, for the curio trade and in some traditional practices (use of dyes or the shells themselves, e.g., as musical instruments).

The Caribbean and Pacific coasts of Costa Rica measure approximately 212 and 1,254 km in length, respectively, totaling 1,466 km. The Caribbean coast of Costa Rica is relatively straight, with strong surf, sandy beaches on the north section, and only two small mangrove areas, one in the central section and one in the south; tide range is less than 50 cm. The southern section, from Limón to the border with