pairs of labial denticles, and in having much more numerous and more closely spaced axial periostracal blades.

The single operculum I have seen (of the live-collected paratype, CAS. 38865) has a central nucleus, but as stated above this is not uncommon in *S.* (*M.*) *parthenopea parthenopea* as a result of injury.

The specimen from off Guaymas, Mexico (SU. 48576) has much weaker axial sculpture and more widely spaced nodules than in the other specimens examined, and so resembles *S.* (*M.*) *parthenopea parthenopea* in most features, differing only in the lower spiral cords and in having six equally strong cords on the body whorl. Thus, although *keenae* is a highly distinctive form, it intergrades with *S.* (*M.*) *parthenopea parthenopea* in most features, and seems best regarded as a further subspecies of the *parthenopea* complex.

The new subspecies is named for Dr A. Myra Keen of Stanford University in recognition of many personal kindnesses to the writer, and of her many major contributions to the knowledge of the Mollusca of western America.

Distribution and Dispersal of *S.* (*M.*) *parthenopea*

Septa (*Monoplex*) *parthenopea* is found in the western Mediterranean Sea, in the central eastern Atlantic from Spain to Angola (but not in South-West Africa), in the central western Atlantic from Bermuda to Rio de Janeiro, in central western America, in South Africa and southern Mozambique, in southern Australia and northern New Zealand, and in southern Japan. Its distribution is one of the widest of any benthic marine gastropods, and approaches that of the truly pelagic groups. The wide distribution is no doubt due to its long larval life. The gap in distribution on the West African coast is probably due to the cool, northward flowing West Benguela Current. The distribution pattern is interpreted as follows.

Septa (*Monoplex*) *parthenopea* evolved from *Septa* s.str. in Europe during the early Miocene, and by transport of planktonic larvae in currents, spread rapidly throughout the eastern and western central Atlantic, through the Panama seaway to western America, and south to South Africa. By the Pleistocene, when the Isthmus of Panama had developed, *S.* (*M.*) *parthenopea keenae* had evolved in central western America; and (possibly due to the lengthening of larval life by the lowering of sea temperature) the larvae were carried by the west-wind drift from South Africa to Australia and New Zealand. From there the species migrated through the western Pacific archipelagos to Japan, where the subspecies *S.* (*M.*) *parthenopea echo* evolved. The tropical equatorial waters of the central Indo-Pacific are presumably now acting as a partial or complete barrier to the dispersal of larvae between Australasia and Japan, while the west-wind drift has been able to maintain genetic continuity between the South African and Australasian populations of *S.* (*M.*) *parthenopea parthenopea.* Similar histories seem likely for most of the widespread genera of the Cymatiidae.

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