Abstract
An undescribed freshwater fish was recently discovered during a biological inventory of Area de Conservación Guanacaste, northwestern Costa Rica. This new species of Poeciliopsis is closely related to a group of widespread species of small spotted fishes designated as the Poeciliopsis gracilis complex in this study. The complex extends on both versants from southern Mexico to Nicaragua, and with this new finding, extends into Costa Rica. The new species is distinguished from its Central American relatives by its lack of lateral and ventral markings, higher pectoral and caudal-fin counts and more posterior placement of the dorsal fin. Poeciliopsis santaelena is endemic to the Río Potrero Grande, a river whose flow is reduced to just a few pools during the long dry season and flows fully only during very rainy weather. It is just another in a growing list of threatened or endangered species found in this unique peninsular environment. Rev. Biol. Trop. 56 (2): 829-838. Epub 2008 June 30.

Keywords
New endemic species, poeciliid fish, Santa Elena Peninsula.