Abstract
In order to characterize the diet of Astropecten brasiliensis and Luidia ludwigi scotti, the stomach content of both starfish species was analyzed. Starfishes were sampled for two years off Puerto Quequén coast in the Buenos Aires province (Argentina), at a depth between 40 and 60 m. The main prey items were analyzed in relation to the starfish’s sizes and identified to the lowest possible taxonomic category. A. brasiliensis showed the most diversified diet, comprising a total of twenty eight different prey species; bivalves and gastropods predominated. In contrast, L. ludwigi scotti only showed eight prey species with bivalves, foraminifera and ophiuroids as the most frequently found groups. There were differences among the prey groups eaten by each sea star species, and prey in common differed by size. We found different prey species distribution according with L. ludwigi scotti sizes. There may be competition for food resources, and diet differences may allow the coexistence of A. brasiliensis and L. ludwigi scotti in the area.

Keywords
Astropecten, Luidia, asteroids food items, sandy bottoms, Argentina.