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[Biological parameters, ecology and population trends of the Mediterranean endemic skate, *Raja polystigma*, in the Balearic Islands.](#)

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Abstract:Elasmobranchs are a vulnerable group that has been overexploited for almost half a century in the Mediterranean. However, few elasmobranch species have been assessed because information on their basic biological parameters is lacking for most species. *Raja polystigma* is a poorly studied endemic skate in the Mediterranean. The aim of this work is to determine some basic life history parameters of this skate in the Balearic Islands. Data were collected from commercial catches and during MEDITS surveys. Total length varied from 17 to 59 cm for both sexes, with a higher proportion of females than males. Allometric and morphometric relationships differed between sexes, females being heavier for a given size. Females matured at a larger size than males (L50 47.7 cm and 38.4 cm, respectively). Potential fecundity ranged between 11 and 45 yolked oocytes per female, and spawning was observed mainly during winter and spring. Persistent hotspots of adults and juveniles were detected on the shallow shelf off the northwest of Mallorca and east of Menorca, with adults being found mainly in the shallow and juveniles in deeper areas. Time series of abundance and frequency of appearance showed stable trends throughout the study period (2003-2018).

Keywords:speckled ray,biology,reproduction and condition,diet,fecundity,distribution,population indicators,western Mediterranean.