THREE NEW SPECIES OF THE GENUS SYNONCHIUM COBB, 1920 (CHROMADORIDA: SELACHINEMATIDAE) FROM MANGROVE AREAS OF PAKISTAN

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Abstract

The mangroves areas of Pakistan are unique being representative of the largest arid zone mangroves in the world. Mangroves swamps support a high biological diversity of microorganisms. Pakistan has a rich meiofauna in the coastal and inshore water of the Arabian Sea. Samples collected during a survey for meiofauna of mangrove in coastal areas of Pakistan, yielded three new species viz., Synonchium pakistanense n. sp., S. oblongus n. sp., and S. marina n. sp., of the family Selachinematidae which are described here with measurements, descriptions, drawings, light microscopic photographs and a key to the species. The Selachinematidae nematodes are characterized by having annulated cuticle with transverse rows of punctations, multi-spiral amphids, buccal cavity ornament, in the form of mandibles, precloacal supplements, cup-shaped or setose, testes usually paired, ovaries always paired opposed and reflexed. Specimens of S. pakistanense n. sp., are characterized by five similar sized teeth on the mandibles, presence of distinct punctations on the cuticle, bluntly rounded tail and presence of ventromedian supplements in male. S. pakistanense n. sp., comes close to S. obtusum Cobb, 1920; S. capense Heyns & Swart, 1995; S. mediterraneum Vinciguerra & Orselli, 1997 and S. siculum Vinciguerra & Oreslli, 1997 but differs from them in a number of characteristics. Synonchium oblongus n. sp., closely related to S. depressum Gerlach, 1954 and S. marina n. sp., in having conoid tail and amphid three time as broad as high, but it differs from S. depressum in combination of characters: mandible with five teeth, slender body, smaller tail and spicules, presence of gubernaculum and ventromedian supplement in male. It differs from S. marinan. sp., in smaller body length, mandible with five teeth, presence of gubernaculum, longer tail, and smaller pharynx and in greater tail ratio. S. marina n. sp., is characterized by oblong amphid, robust body, mandibles with three large similar sized teeth and presence of preanal supplements. It comes close to S. depressumGerlach, 1954, and S. oblongus n. sp., in having conoid tail and amphids wider than high but it differs from S. depressum in longer body, in greater a, b and c ratios and smaller c'ratio. It differs from S. oblongus n. sp., in longer and robust body in greater a, b and c ratios and smaller c' ratio, wider head, amphid less wide, in longer spicules, in number of supplements, absence of gubernaculum and mandibles with three teeth. A list of free-living marine nematodes found during the surveys is also incorporated...