

**M.S.40. RADHAKRISHNAN NAIR, P.N.—Studies on the Systematics, Biology and Fishery of Rainbow Sardines, *Dussumieria SPP.*, from Indian Waters —1984—
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The present study deals with the systematics, biology and fishery of rainbow

sardines of India belonging to the remus *Inssumieria* of the family Dussumieriidae with special reference to *Dussumieria acuta*.

The systematic position of the species of *Dussumieria* has been reviewed. Samples of rainbow saridines were collected from different centres along the southern coast of India and were analysed morphometrically and meristically, employing standard statistical methods, and the existence of two species, viz. *D. acuta* and *D. hasseltii* under the genus has been established beyond doubt.

Diurnal variation in feeding habit was noticed in *D. acuta*.

A comparison of the food items of *D. acuta* from the Gulf of Mannar and the Palk Bay indicated that the major food constituents were essentially the same in both these localities.

The gonads in *D. acuta* are bilobed and distinctly asymmetrical in their size, the right lobe being bigger than the left lobe.

The spawning season of *D. acuta* was also ascertained by estimating the gonado-somatic index.

Analysis of coveriance showed that among the *Dracuta* males and females of both the years there were no significant variations either in slope or elevation.

The catch data of rainbow sardine at Mandapam area, as estimated by the author, for a period of 7 years from April 1969 to December 1975 showed an annual average of 9415 Kg.