

Trachypterus, Gouan.

A considerable number of species have been described, some of which are without doubt merely stages of growth, while others were described by authors who had no opportunity of comparing them with well-authenticated specimens. On the other hand, in a genus which seems to comprise a plurality of species, but in which the distinctive specific characters are obscured by a variety of circumstances, it is difficult to arrive at a satisfactory conclusion with regard to the validity of the species described. One of the most common and best known is the Vagmær or Deal-fish, *Trachypterus arcticus*, from the North Atlantic, of which almost every year one or more specimens are secured on the Norwegian and British coasts after severe gales. From the Mediterranean and neighbouring parts of the Atlantic several species have been described, viz., *Trachypterus tænia* (Bl.), of which, according to Emery, *Trachypterus flicauda* (Costa), *Trachypterus iris* (Walb.), and *Trachypterus spinolæ* (C. and V.), are successive stages of growth; *Trachypterus gryphurus* (Lowe); *Trachypterus liopterus* (C. and V.), *Trachypterus rüppellii*¹ (Gthr.); *Trachypterus cristatus* (Bonelli); and *Trachypterus repandus* (Metaxa, Costa). From Cuba a species is described as *Trachypterus trachyurus* by Poey, and one from the East Indian Archipelago as *Trachypterus semiophorus* by Bleeker. The instances of the occurrence of this genus in the Pacific are very few, viz., *Trachypterus altivelis* (Kner.), from Valparaiso, *Trachypterus weychardti* (Philippi), also from the Chilian coasts, and *Trachypterus arawataæ* (Clarke), from the coast of New Zealand.

The example in the Challenger collection is only $1\frac{1}{2}$ inches long, and was obtained at Station 207, near the Philippine Islands, when the dredge was used at a depth of 700 fathoms; but as this extremely delicate specimen was preserved in a tolerably good condition, it is probable that it entered the dredge at no great distance from the surface. It is extremely similar to the small *Trachypterus* figured by Costa (Faun. napol., Tab. ix.), under the name of *Trachypterus repandus*. It has the same shape of body, the same elongate caudal fin, and the anterior dorsal rays and ventral fins are prolonged in an extraordinary manner. Also the tail and body are ornamented with transverse dark spots similarly arranged. But the prolonged fin-rays are shorter than in *Trachypterus repandus*, and lack lobes of skin.

It seems to me that both these small individuals represent the young stage of species of *Trachypterus*, which, when older, lose the extraordinary development of their fin-rays. Probably the fish from the Philippine Islands is a species distinct from that

¹ The specific distinctness of this fish has also been doubted; and, therefore, I beg again to draw attention to the position of the first lateral black spot, in which the specimen differs from the other Mediterranean specimens of the same size which are known to me.