

The scales are somewhat differently sculptured on the different parts of the body of the fish, in individuals of different ages, and in specimens from different localities. In a specimen from the Kermadec Islands, 23 inches long; a scale (fig. α), taken from the middle of the fish above the lateral line, has from five to seven nearly parallel ridges, of which the middle one is the highest, ending behind in a strong spine. The other ridges are more or less faint, with small spines either at the end or in the middle. In the scales on the back (fig. α'), as well as on the abdominal region, the median spine projects strongly and is preceded by two or three smaller ones, which cover each other in an imbricate fashion. In the scales of the lateral line the median ridge is, as it were, longitudinally divided by the muciferous channel, forming above and below the line a series of imbricate spines, generally no other ridges being visible on these scales. On the head the scales are more or less modified into scutes, with serrated ridges, which form more or less regular stellate figures on each scute, rendering the whole surface of the head very rough; the largest scutes are those occupying the raised bony ridges which are found in every species of this genus. The course of the muciferous channels on the snout and other parts of the head can be easily traced by series of very small and short black tubules, by which the mucous secretion is discharged, and which are particularly numerous on the lower part of the snout.

In a specimen from the Kermadec Islands, which is only 12 inches long, all the spinous projections are comparatively weaker and the parallel ridges on the scales less distinct.

In a New Zealand specimen, $18\frac{1}{2}$ inches long, the dermal ossifications on the head are considerably smaller, so much so that they do not always touch each other; also on the body the spines project less, but the parallel arrangement of the ridges is much more conspicuous. On the other hand, in Japanese specimens the armature is much more developed, and there is not the same great difference in the size of the median and lateral spines.

In a young specimen $5\frac{1}{2}$ inches long from Japan (fig. A') the snout has already the characteristic form and is nearly twice as long as the eye, the body is scaled, and on some of the scales (fig. α'') minute spines are arranged in two or three series, but not close enough to form continuous ridges. No scutes are visible on the head except along the osseous ridges found in nearly all the species of this genus.

Very young specimens (fig. A''), $2\frac{1}{2}$ inches long, are partially covered with extremely delicate scales (fig. α'''), those on the back being armed with a stronger median and sometimes an additional pair of weaker lateral spines. The ridges on the head are simply serrated and the snout is comparatively shorter, the eye being only two-thirds of its length.

Figures A of Pl. XXIX. represent the entire view of a specimen from the Kermadec Islands, and the lower view of its head, of nearly two-thirds of the natural size; A' , side view of the head of a young Japanese specimen ($5\frac{1}{2}$ inches long); A'' , a very young