

## PLACODUS ANDRIANI.

*To the Editors of the Annals of Natural History.*

GENTLEMEN,—In examining some fossil specimens recently transmitted for sale, by M. Krantz of Berlin, to the British Museum, I noticed certain structures in a part of the cranium of the *Placodus Andriani*, Agassiz, which convinced me that that triassic animal belonged to the class of Reptiles, and not, as Count Münster and Prof. Agassiz have described, to the class of Fishes. As some account of the teeth of *Placodus* is given in the chapter on the dentition of Pycnodont Fishes, in my 'Odontography' (p. 73. pl. 30), on the authority of those eminent palæontologists, and before I had had the opportunity of seeing original specimens, I lose no time in correcting the error, as I trust to be able to prove it to be, when the evidences of the Reptilian nature of *Placodus* are given in detail.

I am, Gentlemen,

Your obedient Servant.

British Museum, October 13, 1857.

RICHARD OWEN.

*A few Remarks on the Midge Fly which infests the Wheat.*

By JONATHAN COUCH, Esq., F.L.S. &c.

In the more eastern parts of the kingdom there has been long known a little fly, the larva or maggot of which is highly injurious to the ear of wheat, but, as far as my limited inquiries extend, it has been little known in Cornwall, and it is only in the present year that I have had an opportunity of examining it, or of hearing of its ravages among us. It is called the wheat midge, or, according to its more scientific name, *Cecidomyia Tritici*; of very minute size, dark colour, and slender shape; the larva is of a decided yellow colour and active habits.

A long, and it may be supposed accurate account of this little pest is to be found in a small work on the Blights of Wheat, published by the Religious Tract Society; and as the smallness of the price of this volume renders it accessible to all who wish for information on the subject, I will not repeat anything which is to be learnt there. But in addition to this, an account of this midge-fly—for there are several others of this genus—in its depredations on our staff of life, was read before the meeting of the British Association, when it was held at Plymouth, by an eminent naturalist; and it is to notes made at that meeting, added to the few observations collected in the month of July in the present year, that I am desirous of soliciting attention on the present occasion, to prepare our farmers for meeting this plague, and, if possible, to prevent its obtaining residence among us.

According to the little tract above referred to, this fly lays its eggs in the grain in the month of June; but some of them were busy about the grains in the latter half of July; and the succession of development and hiding, which appears to take place in the larvæ, is presumptive proof that the depositing of eggs is not accomplished in a very short space. At this time the grains of wheat had grown



to the full size, and such as had been first attacked had disappeared altogether, their place being marked with an empty husk. But these maggots, small as they are, are not soon satisfied, nor is their larval state of very short duration; they therefore scatter themselves further among the grains; and one of the latter was observed especially, that had suffered no injury in the course of its growth, but which was infected with a pale spot at the place where a wandering maggot had fixed itself to begin its operations. Under such circumstances, the ravages of this apparently contemptible insect must prove exceedingly formidable; and the more so, as there is reason to suppose that they continue to feed until the hardening of the grain renders it beyond their power. It is remarkable that this larva has not been traced into its state of chrysalis. Such of these larvæ as are first hatched escape into the earth, where, no doubt, they undergo their natural changes, to prepare them for again appearing in the form of a fly in the following year; but such is not the fate of a large number of them, which, according to the observant naturalist quoted above, are conveyed to the barn, and from thence to the winnowing machine, where they become separated in the chaff. So great is the number of these, that from 10,000 to 20,000 are believed to have been contained in a single bushel. By the action of winnowing they become separated with the dust, and they are found to drop to the ground within the distance of three yards from the machine. It is not the least remarkable point in the history of this animal, that all these larvæ, thus separated, are incapable of surviving; and the utmost skill has not been able to rear them into the condition of a fly: no danger for the future is therefore to be feared from them; and it is only those which have buried themselves in the field that produce the insect for the future harvest. The difficulty of providing against future injury is great in proportion to our ignorance of the further history of the insect; but it has been observed that heavy rolling of the ground in which it is buried—or what is better, the trampling of much cattle—has been to a considerable extent successful. The exact season for doing this must be determined by experience.—*Report of the Royal Cornwall Polytechnic Society for 1856.*

*Description of Actinopsis, a new genus of Actiniæ from Norway.*

By D. C. DANIELSSEN and J. KOREN.

Genus ACTINOPSIS, n. g.

Brevis, cylindrica, infra in magnum et gracilem basin extensa, margine oris in duos longos et rigidos semicylindros prolongato, quorum margines laterales deorsum flexi et extremitates bisulcæ; tentacula non retractilia.

*Actinopsis flava*, the only species, is about  $\frac{1}{2}$  an inch in length of body, and the outer tentacles measure about  $\frac{2}{5}$ ths of an inch. Its colour is yellow. Two specimens were taken in the Bay of Hardanger, half a league from Utne, at a depth of about 250 fathoms. They were attached to *Lima excavata*.—*Fauna Litt. Norveg.* ii. p. 87.





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