

A search of the literature revealed a wide-spread interest in the reactions of fish to chemical substances such as pollutants from the industry⁸. The results of a great number of experiments indicate that substances probably perceived as odours and tastes do not arouse biologically typical fright reactions amongst fishes or schools of fishes. Strong poisons and irritants, however, do evoke violent reactions, as is to be expected. Apparently only one out of the many experiments on these lines has yielded results germane to the problem in question. During a study, undertaken to find whether migrating Pacific salmon can be repelled from polluted river locations, it was found by accident that dilute water rinses of human and, more generally, mammalian skin had a distinct, repellent action. Dilute solutions of some tens of substances failed to change the rate of migration. Obviously an acute olfactory sense enables Pacific salmon to detect predators like bears, sea-lions and seals⁹.

It might be imagined that during these types of fright reactions fishes are interacting in a similar way as described before. Interaction of this kind, however, was not envisaged in the experiments just mentioned. The distribution of a number of fishes in gradient fields was mostly evaluated as being the result of individual responses to the applied chemical stimulus. It follows from the above considerations that the possibility of mutual interaction should be borne in mind when reviewing the conclusions from these experiments.

Zusammenfassung

Beim kleinen tropischen Schwarmfisch *Rasbora heteromorpha* löst ein Schreckstoff aus verletzter Haut chemisch Alarm- und Fluchtverhalten aus. Es zeigte sich, dass das rasche Übergreifen der Schreckwirkung auf alle Schwarmmitglieder durch optische (und wohl auch mechanische) Reize bedingt ist, die von den bereits alarmierten Individuen ausgehen.

⁸ J. R. E. JONES, J. exper. Biol. 28, 261 (1951). – R. W. HIATT, J. J. NAUGHTON, and D. C. MATTHEWS, Biol. Bull. 104, 28 (1953), and others.

⁹ J. R. BRETT and D. MAC KINNON, Fish. Res. Bd. Canada, Pac. Prog. Rept. No. 80, 21 (1952); J. Fish. Res. Bd. Canada 11, 310 (1954).

Corrigendum

Z. SUPEK and S. MILKOVIČ: *Quantitative Biological Determination of 5-Hydroxytryptamine*, Experientia, vol. XII, fasc. 2, p. 71 (1956).

The last paragraph on page 72 reads: 87 $\mu\text{g/ml}$ and 26 $\mu\text{g/ml}$, but it should read: ng/ml, i.e. "nanogram", which is $1/1000$ of μg (see C. SMITH, *Biomathematics*, London 1954, p. 438).

CONGRESSUS

U. S. A.

First International Congress on Developmental Biology

Rhode Island, July 23–26, 1956

Under the auspices of the Institut International d'Embryologie a congress on developmental biology will be held in Brown University, Providence, R. I., USA.

It will be followed by a conference on Cytodifferentiation, sponsored by the I.U.B.S. (July 27–31).

The registration fee for the congress will be \$5.00. Accommodation can be provided at a flat rate of \$7.00 per day for room and board to those who remain for the duration of the congress or the conference or both. Applications must be sent as soon as possible to Prof. J. WALTER WILSON, Department of Biology, Brown University, Providence 12, R. I., USA. Correspondence about the congress and conference can be sent to Mr. G. A. NORTON, Administrative Assistant, Developmental Biology Conference Series 1956, National Academy of Sciences, National Research Council, Division of Biology, 2101 Constitution Avenue, Washington 25, D.C., USA.

BELGIQUE

Congrès international de cybernétique

26 au 29 juin 1956

La Province de Namur organise, sous le Haut Patronage du Ministère de l'instruction publique et de l'UNESCO, et sous la Présidence d'Honneur de Monsieur le Gouverneur de la Province de Namur, un congrès international de cybernétique qui se tiendra à Namur (Belgique).

Les personnes qui auraient l'intention de participer au congrès au titre d'auditeur, d'auteur de communication ou d'exposant de matériel, sont priées de se faire connaître en écrivant au Secrétariat du congrès international de cybernétique, 13, rue Basse-Marcelle, Namur (Belgique). Des informations détaillées leur seront envoyées.

E. STIEFEL