In addition, Latreille, 1810, 422, definitely designated *Astacus fluviatilis* as type of *Astacus*.

Potamobius Leach in Samouelle, 1819, EuC, 95, was proposed as a new genus with *Potamobius fluviatilis*, syn. *Cancer astacus*, as monotype. Accordingly *Potamobius*, 1819, is an objective synonym of *Astacus*, 1775.

"*Astacus* Leach's MSS." in Samouelle, 1819, EuC, 95, is cited as if it were the publication of a new genus, monotype, *Astacus gammarus* Linn., syn. *Astacus marinus* Fabr., "the common lobster" of the London markets, from Scotland, Norway, European ocean. If this be interpreted as a new genus, the name is a dead homonym of *Astacus*, 1775; if it be interpreted as a division and restriction of *Astacus*, 1775, the elimination of *fluviatilis* syn. *astacus* is contrary to Article 30d of the International Rules.

All later references, together with the discussions as to the course adopted by Milne-Edwards, and others, are irrelevant under the International Rules.

This particular case is more than one of simple academic nomenclature. It involves the technical names of several animals which come into important consideration in connection with the subject of food poisoning and food inspection; and, however much systematists may differ in argument and opinion in respect to the names of animals discussed only in technical publications, it seems desirable that the technical names which eventually get into administrative work and even into law should be as uniform and unambiguous as possible.

Dr. Ortmann, after reading the foregoing discussion, writes us under date of February 4, 1926, that he concurs in the views expressed here.

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THE DECOMPOSITION OF CERTAIN TOXINS BY KNOWN ORGANISMS[1]

SINCE the writer[2] reported that vanillin decomposing organisms do not decompose resorcinol, cumarin, quinoline, benzidine or caffein in dilute solution cultures it has seemed desirable to test several known organisms from the Parke Davis Laboratory and from the Laboratory of Public Health, for their ability to decompose such toxins as vanillin, cumarin, caffein and resorcinol in solution cultures.

Suitably modified Robbins' solution, containing vanillin, was prepared and inoculated in duplicate with pure cultures of the organisms listed below. After incubation at room temperature for about one month observations for the growth of the organisms and tests for the decomposition of the vanillin were made.

It was found (a) that Bacillus Hartlebii, Bacillus cyanogenus, Bacillus carotovorus, Bacillus phaseoli, and Bacillus mycoides failed to grow or to decompose the toxin; (b) that Bacillus tumefaciens, Staphylococcus, tetragenus, Bacillus megatherium, Bacillus aerogenes, Bacillus coli communis, Bacillus prodigiosus, Micrococcus tetragenus, Spirillum rubrum, Aspergillus fumigatus, Bacillus tracheophilus, Vibrio Metchnikovii, Vibrio tyrogenus, and Azotobacter chrococcum, grew but did not decompose it; (c) while, on the other hand, Pseudomonas pyocyaneus and Bacillus fluorescens liquifaciens did decompose it.

It appears from these results that though the organisms multiplied in many cultures sufficiently to render the solution turbid yet there was decomposition of vanillin by two organisms only.

In case of cumarin, caffein and resorcinol, which were treated in the same way, equal care was taken that proper conditions, such as suitable substratum and correct reaction, were maintained, but in no case was there complete decomposition.

While the results are mostly negative they do in a large measure support the contention that the organisms which decompose toxins are specific.

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[1] Published with the permission of the director of the Alabama Experiment Station.

[2] SCIENCE, 60, 390 (1924).

CAVALLINI'S "ASEXUAL CYCLE IN ARCELLA"

IN view of the existing confusion regarding the life histories of the rhizopods, especially the thecamoeba, it seems apropos to offer any available evidence that might help in clarifying this situation.

The two papers by Francesca Cavallini, *viz.* "The Asexual Cycle in Centropyxis aculeata and its Variability in Relation to Heredity and Environment" and "The Asexual Development of Arcella vulgaris," which appeared in the January issue of the *Journal of Experimental Zoology*, represent such painstaking efforts, and apparently the interpretations are so justly warranted that special attention should be called to their merits.

For the last six years I have spent most of my research time on the thecamoebae, being primarily interested in experiments other than those dealing with life histories: but during this period stages in the development of these forms have been encountered often and many observations and drawings have been made. What was interpreted to be developmental