

Materials list.

Item	Number required	Description
1	1	Spore receiver (a), with B24/29 ground glass mouth (♀), 20 mm deep/22 mm wide, capacity 5 ml up to the neck.
2	1	Cyclone tube (b) (Spore inlet tube), 2 mm internal diameter (up to 1.5 cm from the tip) with dilated (0.5 cm) base passing through B24/29 (♂) hollow ground glass stopper, length, 5 cm from the tip and 8.5 cm through the stopper, bent about 60°.
3	1	Vacuum line glass connector (c), length 5 cm, diameter 0.5 cm.
4	Any required number (1 for complete outfit)	Micro-Conway diffusion cell (d) (minus the lid), 13 mm deep/13 mm wide, capacity 0.5 ml.
5	Any required number (1 for complete outfit)	Conway diffusion cell (e), (minus the lid) 18 mm deep/18 mm wide, capacity 2 ml.
6	1	Rubber band retainer (f)

a, b, c, d, e, and f refer to components of the collector in the figure.

with aqueous solutions of fungicides/drugs by closing the opening of the cyclone tube (b). Since the cyclone tube dips slightly below the rim of the Conway diffusion cell in the spore receiver, it prevents spores being either carried away through the vacuum line or sticking to the inside wall of the spore receiver. All spores are collected in the diffusion cell only. The diffusion cells can be used as preweighed vessels for weight determination of fungal spores and pollen grains.

The dimensions of the various components of this collector are not critical except the bore of the spore inlet tube which of course is critical, since a large bore size leads to mycelial bits being picked up with the spores. However, considering the spore size of a large number of pathogenic and non-pathogenic fungi a bore size of about 2 mm internal diameter was found to be most convenient.

- 1 The award of a Junior Research Fellowship to M.S. from U.G.C. is thankfully acknowledged.
- 2 E. Cherry and C.E. Peet, *Phytopathology* 56, 1102 (1966).
- 3 W. Woodbury, V. Macko and M.A. Stahmann, *Phytopathology* 57, 455 (1967).
- 4 I.W. Tervet, A.J. Rawson, E. Cherry and R.B. Saxon, *Phytopathology* 41, 282 (1951).

SYMPOSIA

An interdisciplinary symposium on the brine shrimp *Artemia* in the USA

A very unusual scientific event happened recently: from August 20–23, 1979, the 1st international symposium on the brine shrimp *Artemia* was organized in Corpus Christi (Texas, USA) by the port Aransas Marine Laboratory of the University of Texas Marine Science Institute and the *Artemia* Reference Center of the State University of Ghent, Belgium. About 200 participants from 24 countries attended this conference.

During the 1st day, 6 review papers were presented on the various disciplines of *Artemia* research, i.e. ecology, radiobiology, physiology, biochemistry, molecular biology and aquaculture. 80 invited and regular papers were then presented during the next 2 days. The last day of the conference was devoted to the organization of 4 workshops on the following topics: characterization of *Artemia* strains for application in aquaculture; commercial aspects of *Artemia*-exploitation; species characterization in *Artemia*; proposal for an intercalibration exercise for a standard *Artemia* toxicity test. The proceedings of this conference, containing all the papers presented and the reports of the workshops, will be published in 3 separate volumes.

One of the most interesting aspects of this symposium was the meeting together of scientists and aquaculturists who found in the brine shrimp a new source of food of economic interest that could be cultured. From the 4 sections (morphology, genetics and radiobiology; physiology and toxicology; biochemistry and molecular biology; ecology,

culturing and use in aquaculture) the following most interesting points were discussed:

1. *Artemia* is a genus of the Phyllopoda, which comprises different closely related species (sibling species). This new information leads to an entirely new systematic within this genus.
 2. The environment plays an important role in the life cycle and, for an optimal production, several factors must be considered, like salinity, light, temperature, oxygen and nutritional requirements.
 3. *Artemia* is an excellent material for biochemical and molecular studies.
 4. Production techniques for nauplii, adults and cysts are now experiencing a real revolution. Furthermore, new criteria are proposed for evaluating the "suitability" of *Artemia* strains as a food source. The knowledge gained from the fundamental scientific studies of *Artemia* greatly contributes to a better use of *Artemia* in aquaculture. Especially important is the conservation of wild populations together with a better knowledge of some basic elements relevant to their natural productivity.
- The symposium will certainly be a turning point for *Artemia* studies, since the genus has become important for mankind as a source of food. The collaboration between pure biologists, aquaculturists and industrialists is doubtless on the verge of being a very fruitful one.

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