

necessary in the laboratory to simulate approximately the shortest day of the year.

As adults emerged in the cages they were left for 2–3 days for mating. Mating usually took place in late afternoon. Fertilization was established by dissection and found to occur before feeding. Fertilized females were allowed to feed on human arms, guinea-pigs and pigeons. Difficulty was experienced initially in blood feeding of the adult females in the cage during the day time. It soon became apparent that if the adults were kept in the dark (overnight), they fed better on the sugar-water solution, as evinced by an abundance of fluid in their abdomens. The females were then induced to take a blood meal from a human arm during the night, but only 8 adults out of 300 fed. A similar observation was made by Storey⁶. This record was noted only once during establishment of the colony. A guinea-pig was also tried unsuccessfully. In a later attempt to induce the females to take a blood meal, a pigeon was taped overnight on top of the cage. Using this method female mosquitoes engorged.

3 days after the 1st blood meal small beakers (500 ml) containing distilled water were placed in the cages as an oviposition site. 4–8 days (mean 5.61 days) after feeding, oviposition began. We blood-fed adults daily for 10 days, to allow all emerging adults to have a blood meal, and collected eggs over a 12–14-day period. The greatest number of eggs produced by an individual female was 214 eggs and the least was 80 eggs. The egg rafts were removed daily from the cage and kept in small beakers until hatching, which took place within 3 days.

Larvae were reared in lots of 200 larvae in distilled water (500 ml) in large white enamel pans (40 cm in diameter). Larvae were fed on finely ground fish food (Tetramin®)⁷. A small amount was supplied to newly hatched larvae and thereafter an increasing amount as the larvae grew. There should be enough to provide some excess, but not so much as to facilitate bacterial growth and clouding of water. Distilled water was added to compensate for the water loss by evaporation. Overcrowding of larvae was avoided to prevent cannibalism and to avoid the adults being undersized. Larvae left in that medium under laboratory conditions pupated after 11–16 days. Lower temperatures markedly affect the larval development: at 8 °C newly hatching larvae reached the 2nd instar and died, while at 12 °C great mortality was observed among the 3rd stage larvae.

As pupae appeared they were collected daily and transferred to small plastic cups three quarters filled with distilled water in the rearing cages for adult emergence. The pupal stage lasted 4 days under laboratory conditions.

- 1 Kirkpatrick, T. W., XIV Plates. Government Press, Cairo 1925.
- 2 Dame, D. A., Haile, D. G., Lofgren, C. S., Bailey, D. L., and Munroe, W. L., Mosq. News 38 (1978) 68.
- 3 Ford, H. R., and Green, E., Mosq. News 32 (1972) 509.
- 4 Rozeboom, L. E., Am. J. trop. Med. Hyg. 16 (1936) 471.
- 5 Shute, P. G., J. trop. Med. Hyg. 39 (1936) 233.
- 6 Storey, G., Bull. Soc. ent. Égypte 12 (1918) 84.
- 7 Pappas, L. G., Mosq. News 33 (1973) 604.

Announcements

Honors

Professor Franz Oesch, Department of Pharmacology, University of Mainz/FRG, has been awarded the **Robert-Koch-Prize 1982**. The Managing Editors and the members of the Editorial Board of *Experientia* congratulate their Advisory Board member for this great honor.

Corrigenda

L. Fiume, A. Mattioli, C. Busi, G. Spinosa and Th. Wieland: Conjugates of 9- β -D-arabinofuranoside monophosphate (ara-AMP) with lactosaminated homologous albumin are not immunogenic in the mouse, *Experientia* 38 (1982) 1087–1089.

There are two printing errors in the paper. The title reads correctly 9- β -D-arabinofuranoside ... as above. On page 1089, lines 54 and 55 of the left column should read: mice. None of the mice, treated with L-MSA-ara-AMP conjugate and tested for cell-mediated hypersensitivity

P. P. T. Pun, S. M. Ginn and E. M. Flint: Regulation of ppApp synthesis during sporulation of a conditionally asporogenous rifampin mutant of *Bacillus subtilis*, *Experientia* 38 (1982) 663.

While the figure legends are correct, the figures themselves have been reversed.

Federal Republic of Germany

3rd international symposium on invertebrate reproduction

Tübingen, August 22–27, 1983

The symposium is organized by the International Society of Invertebrate Reproduction (ISIR), with 5 sessions with invited speakers covering: 1. Cellular differentiation and cellular events in invertebrate reproduction, especially gametogenesis and fertilization; 2. endocrine control of invertebrate reproduction; 3. environmental adaptations of invertebrate reproduction; 4. population dynamics, reproductive strategies of invertebrate reproduction and their genetical background; 5. manipulation and control of invertebrate reproduction.

Further information by Prof. Dr W. Engels, LS Entwicklungsphysiologie, Auf der Morgenstelle 28, D-7400 Tübingen/FRG.

29th international congress of pure and applied chemistry

Cologne, June 5–10, 1983

The 29th IUPAC congress, organized by the Gesellschaft Deutscher Chemiker, will present main lectures on 'New advances in inorganic chemistry', 'New advances in organic chemistry', 'New advances in physical and theoretical chemistry', 'Progress in the production of chemical basic materials', and 'Education in chemistry'. Plenary lectures on 'Removal of chemical wastes' and 'Removal of wastes of origin other than chemical industry'.

Further information by the General Secretariat, c/o Dr W. Fritzsche, P.O. Box 900440, D-6000 Frankfurt a. M. 90/FRG.