

icantly with body weight for three components in females and one component in males. Although more regressions are significant in males than females, the average amount of variation in quantity as well as in concentration accounted for by body weight was greater in female *O. gloriosa* than male. Sexual differences in the dependence on body weight may be related to the effect of reproduction on body weight in females, suggesting that secretion components are affected by the reproductive status. Effects of age, sex, and reproductive status on the chemical defense of laboratory-reared *Oreina gloriosa* are presented in Eggenberger and Rowell-Rahier¹⁸.

Acknowledgments. D. D. and J. M. P. thank the Belgian Fund for Joint Basic Research for financial support (grant # 2.451390), Dr. M. Herin (Searle) for the FAB mass spectra and C. Maerschalk for the 600 MHz NMR spectra. F. E. and M. R. R. are grateful to H. and G. Bumann for regularly shipping plants to Basel; J. Bonato-Schmidli for technical help; and the Swiss National Science Foundation for financial support (grant # 31-26263.89).

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0014-4754/92/11-12/1173-07\$1.50 + 0.20/0
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Announcements

International training course on biotechnology of cell cultures

Instituto Butantan, São Paulo, Brazil, May 1–21, 1993

Sponsors:

International Cell Research Organization (ICRO)
Fundação de Amparo à Pesquisa de São Paulo (FAPESP)
Conselho Nacional de Pesquisas (CNPq)
Instituto Butantan (IB)

Organizer:

Dr. Carlos A. Pereira, São Paulo, Brazil

Invited Professors:

Dr. O. T. Ramirez, Mexico, Mexico
Dr. M. Modolell, Freiburg, Germany
Dr. H. Hiss, São Paulo, Brazil
Dra. A. M. Moro, São Paulo, Brazil

Objectives:

To teach and demonstrate a series of techniques involving high density cell growth on microcarriers in a 5-liter bioreactor; cell growth in hollow fiber and air lift bioreactors; differentiation and growth of cells derived from bone marrow in hydrophobic teflon membranes; and bacterial growth in an 80-liter pilot-plant fermentor.

Language:

The course will be taught in English.

Applications:

The course will be limited to 15 participants with no more than 5 to come from Brazil.

Some fellowships to cover the travel and staying expenses will be provided for the accepted students. However, the students are encouraged to apply for financial support from local sources.

Requirements:

A good working knowledge of English. At least 2 years of current work in one of the topics of the course.

Applications should include:

- curriculum vitae
- list of publications
- a letter of recommendation
- a brief description of the research project being developed by the applicant
- statement of financial support from local sources

and should be sent to: Dr. Carlós Augusto Pereira
Instituto Butantan

Laboratorio de Imunologia Viral
Av. Vital Brasil 1500 CP 65
05503-900 São Paulo
Brazil

Tel. 55 11 8137222 ext. 233

Telex. 55 11 83325 Buta

Telefax. 55 11 8151505

Applications should reach the organizer by January, 1993. The accepted applicants will be notified by March, 1993.