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BioBriefs

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Deposition on Aquatic Biological Systems, ASTM Committee D-19 on Water, Sheraton Inn, Bal Harbour, FL (William G. Isom, Tennessee Valley Authority, Rm. 2, E&D Bldg., Muscle Shoals, AL 35660)

- 29-31 Symp. on **Biogeography of Central America**, Merida, Yucatan, Mexico (Arthur L. Welden, Dept. of Biology, Tulane Univ., New Orleans, LA 70118)

NOVEMBER

- 1-4 The Adelaide Festival and Conf. on **Biological Agriculture**, Adelaide, South Australia (Hon. Secretary, Soil Assn. of South Australia, Inc., G.P.O. Box 2497, Adelaide, S.A. 5001 Australia)
- 4-7 5th Ann. Mtg. Soc. of **Environmental Toxicology and Chemistry** (SETAC), Hyatt Regency, Arlington, VA (SETAC, P.O. Box 352, Rockville, MD 20850)
- 11-15 89th Ann. Mtg. of the **American Academy of Ophthalmology**, World Congress Center, Atlanta, GA (American Academy of Ophthalmology, P.O. Box 7424, San Francisco, CA 94120-7424)
- 19-24 Agro China '84—The Intl. **Agro-Technologies** Expo. & Symp. Guangdong Scientific Hall, Guangzhou, People's Republic of China (AVP Expositions Co. Ltd, GPO Box 12217, Hong Kong)
- 25 Nov.-1 Dec. Intl. Congress of **Culture Collections**, Bangkok, Thailand (Robert E. Stevenson, Chairman, ICCV-V, American Type Culture Collection, 12301 Parklawn Dr., Rockville, MD 20852)
- 26-29 Conf. on the **Management of Biosphere Reserves**, Gatlinburg, Tenn. (Dr. John D. Piene, Director, Uplands Field Research Laboratory, P.O. Box 260, Gatlinburg, TN 37738)

DECEMBER

- 10-12 4th Biennial Scientific Symp. of the **Assoc. For Thin Layer Chromatography**, Sheraton-University City, Philadelphia, PA (Dr. J. C. Touchstone, University of Pennsylvania, Dept. OBGYN, 3400 Spruce St., Philadelphia, PA 19104)
- 10-12 4th Intl. Symp. on **High Performance Liquid Chromatography of Proteins, Peptides and Polynucleotides**, Hyatt Hotel, Inner Harbor, Baltimore, MD (Shirley Schlessinger, 4th Intl. Symp. on HPLC of Proteins, Peptides, and Polynucleotides, 400 East Randolph, Chicago, IL 60601)
- 14-16 **Tern Symp.**, Washington, DC (Barbara Massey, Pacific Seabird Group, c/o Point Reyes Bird Observatory, 4990 Shoreline Highway, Stinson Beach, CA 94970)
- 16-21 Intl. **Chemical Congress** of Pacific Basin Societies, Honolulu, HI (PAC Chem '84, Intl. Activities Ofc., American Chemical Society, 1155 16th St., NW, Washington, DC 20036)

● **Preserved fragments of DNA extracted from an extinct animal have been cloned** in a University of California, Berkeley laboratory. Researchers found the DNA in a piece of dried muscle tissue in the skin of a quagga (*Equus quagga*), a South African wild ass considered extinct for the last 100 years. The researchers, who reported their findings at the June annual meeting of the American Society of Biological Chemists, are now studying the DNA fragments. So far, they have about 25,000 different clones of DNA derived from the quagga tissue, including bits of mitochondrial genes.

● **Acid rain may accelerate pesticide wash-off** on certain commercially valuable crops. Workers at Cornell University's Boyce Thompson Institute for Plant Research applied three commonly used pesticides to greenhouse-grown potatoes and beans during the summers of 1982 and 1983. After allowing the compounds to dry for one day, the scientists exposed the plants to simulated rain at pH levels between 4.8 and 3.4, the range of rain acidity in Ithaca during the summer months. (Unpolluted rain has a pH of about 5.6.) They found that cupric hydroxide and triphenyltin (TPTH) washed off plant leaves at rates higher than expected, while a third pesticide, chlorothalonil, was not affected. The researchers, who plan to repeat their experiments outdoors this year, suggest that the chemical composition of rain be considered in pest management programs that now assume rain is unpolluted.

● **Alfred Russel Wallace's giant bee has been rediscovered on Indonesian islands** after more than 100 years of presumed extinction. *Chalicodoma pluto*, first recorded by Wallace in 1859 on an island in the North Moluccas, is about 15 times larger than the honeybee. Females, which can reach one and three-fourths inches in length, have unmistakable, huge beetle-like mandibles and an expanded upper lip, which enable them to excavate their nests inside those of termites. Finding the nests is not easy, according to discoverer Adam Messer, a University of Georgia graduate student. Each is marked by a single entrance hole in a termite nest six to nine feet above the ground; six or seven females build a few dozen closed cells in each nest for laying eggs and raising larvae. The cells are lined with resin collected by the females. As in many social bees and wasps, the smaller, less formidable males do little except guard the nest entrance and inseminate females.

● **Methyl ester from sunflower oil has successfully powered a four-cylinder diesel engine** in experiments at North Dakota State University, Fargo. Although pure vegetable oils are too thick to work as fuels—causing power reduction and engine deposit—simple alcohol esters derived from them show promise as potential energy sources. Agricultural engineers who tested the fuel say that vegetable oil-derived fuels could be particularly important to developing nations that do not produce petroleum but have climates appropriate for plant oil production.

● **Ants interfere with the germination and viability of pollen**, a finding that may explain why ant pollination systems are so rare. Researchers from Northwestern University in Evanston, Illinois, and the University of Melbourne in Australia exposed pollen from a variety of plants to several species of ants in laboratory tests. They reported in the March 1984 *American Journal of Botany* (71:421-426) that pollen touched by ants shows reduced viability, reduced percent germination, shorter pollen tubes, and lower seed set than pollen that has not been touched by ants. The researchers suggest that ants secrete a powerful antibiotic—possibly myrmicacin from the metathoracic gland—to combat pathogenic microorganisms that threaten eggs, larvae, and pupae in their underground nests. Those secretions may “by chance also incapacitate pollen grains,” the scientists conclude. “The appearance of compounds which destroyed bacteria and fungi incidentally created a powerful selection pressure against the evolution of ant pollination.”