

SCIENTIA INTERNATIONAL

NOVAS DEL MENSE IN INTERLINGUA

Astronomia. — Le comenciamiento de un nove cyclo de maculas solar es reportate per le observatorio McMath Hulbert al Universitate Michigan. Tal cyclos ha un duration de approximativamente 11 annos e se distingue per le facto que le polaritate magnetic del maculas al nord e al sud del equator se reverte ab un cyclo al proxime.

Biologia. — Le combination de un laser e un microscopio permette le rapide analyse chimic de specimens biologic. Quando le lumine ab le laser passa per le microscopio, illo vaporisa particulas del specimen. Le vapor, excitata per un scintilla electric, emite lumine que revela, per su longor de unda, le presentia de varie elementos. Le metodo esseva disveloppate per un gruppo de recercatores al Centro Medical del Universitate Boston.

Cardiologia. — Un simia mantenite con un dieta de alte contento de grassia disveloppava un excesso de cholesterol in le sanguine e moriva de infarcimento myocardial post occlusion de arterias coronari. Iste caso es le prime tal unquam reportate in un simia. Illo esseva studiate al Universitate Northwestern in Chicago.

Medicina Nucleari. — Experimentos con muses indica que un breve e intense dose de radiation gamma pote esser quattro vices plus efficace in accurtar le vita de ille animales que le mesme dosage administrate in micre doses durante un periodo de plure septimanas. Acute doses de radiation gamma produceva irreversibile damnos in le chromosomas, durante que micre doses permitteva lor auto-reparation. Del altere latere, le damnos resultante ab radiation per neutrones permitteva nulle reparation.

Nutrition. — Experimentos con rattas ha demonstrate que lor requirimento de sal es plus alte durante pregnantia e que deficiencia de natrium durante pregnantia resulta in le formation excessive de renina, un enzyma renal que pote causar hypertension sanguine. Durante 5 annos, Dr. Ruth L. Pike del Universitate Statal Pennsylvania ha studiate le effectos de varie nivellos de natrium in le dieta de rattas. Illa trovava que animales non-pregnante poteva regular le retention e excretion de natrium e assi mantener un nivello normal de ille elemento in le corpore in despecto de excesso o deficiencia de sal in le dieta. Le rattas pregnant, del altere latere, non poteva mantener un normal nivello de natrium in le corpore con dietas marcatamente deficiente in ille elemento. Le prole de rattas con dietas deficiente in natrium esseva minus pesante e minus matur que le prole de rattas con dietas normal.

Pisceria. — Un nove metodo pro le preservation de pisces in regiones tropic consiste in applicar ammoniaco in forma liquide o gaseoso al piscata brevemente post su captura. Le metodo esseva disveloppate per un gruppo de scientistas in le Instituto Central de Recercas de Technologia Alimentari a Mysore in India. Le recercatores reporta le preservation de sardinas sin refrigeration durante duo menses. Nulle deterioration del valor nutritive del sardinas esseva constata. Le producto final del processo es libere de omne residuo mesurabile de ammoniaco. In multe partes del mundo, pisces edibile es abundante in certe saisons, sed lor preservation ha essite difficile in paises de climate tropic.

Recercas de Cancere. — Per refrigidar micre areas de pelle durante le tractamento de cancere del collo o del capite, multo plus alte doses de radiation pote esser empleata salvemente, secundo un reporto de Dr. E. J. Liebner del Universitate Illinois. In le tractamento de 35 patientes, Dr. Liebner dirigeva un jet de aere frigide al area exponite al fasce de radiation de un betatron. Nulle inflammatione e nulle lesion esseva constata in le pelle del patientes, ben que doses total de 6.000 a 8.000 roentgen esseva administrata intra un periodo de 6 a 7 septimanas.

Recercas de Cancere. — Al Mundial Assemblea Medical in New York Dr. J. T. Grace Jr. del Instituto Memorial Roswell Park in Buffalo reportava un caso de infection accidental de un assistente laboratorial con un virus que produce tumores nonmaligne in simias. In 7 dies un anticorpore anti le virus appareva in le victim. In 4 menses, un tumor noncancerose se manifestava. Iste tumor accidental in un homine esseva identic con le tumor experimental expectate in simias.

• Science News Letter, 84:276 Nov. 2, 1963

Questions

COMMUNICATIONS—What will soon ease the crowded international radio spectrum? p. 280.

MEDICINE—How much is spent yearly by elderly persons on quack remedies? p. 277.

METEOROLOGY—How are school children helping the U.S. Weather Bureau? p. 281.

NATURE NOTE—What variations of cranberry are found in the United States? p. 283.

PHYSICS—Into what two groups do particles fall? p. 275.

TECHNOLOGY—What is the heart and symbol of automation? p. 278.

SCIENCE NEWS LETTER

VOL. 84 NOVEMBER 2, 1963 NO. 18

Edited by WATSON DAVIS

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N.W., Washington, D.C. 20036, NOrth 7-2255. Cable Address: SCIENSERV.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; ten or more copies in one package to one address, 7½ cents per copy per week; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage. Change of address: Three weeks notice is required. Please state exactly how magazine is addressed. Include postal zone number.

Copyright © 1963 by Science Service, Inc. Reproduction of any portion of SCIENCE NEWS LETTER is strictly prohibited. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicated services issued by Science Service. Science Service also produces and distributes THINGS of science (monthly), produces and publishes books, and conducts the National Science Youth Program.

Printed in U.S.A. Second class postage paid at Washington, D.C. Established in mimeograph form March 13, 1922. Title registered as trademark, U.S. and Canadian Patent Offices. Indexed in Reader's Guide to Periodical Literature, Abridged Guide, and the Engineering Index. Member of Audit Bureau of Circulation.



SCIENCE SERVICE

The Institution for the Popularization of Science organized 1921 as a non-profit corporation.

Board of Trustees—Nominated by the American Association for the Advancement of Science: William W. Rubey, University of California at Los Angeles; Wallace R. Brode, Washington, D.C. (Treasurer); Douglas Whitaker, Rockefeller Institute for Medical Research. Nominated by the National Academy of Sciences: Harlow Shapley, Harvard College Observatory; Philip Bard, Johns Hopkins University; Henry Allen Moe, John Simon Guggenheim Memorial Foundation. Nominated by the National Research Council: Leonard Carmichael, Smithsonian Institution (President); John R. Dunning, Columbia University; Benjamin H. Willier, Johns Hopkins University. Nominated by the Journalistic Profession: Gordon B. Fisher, Allentown (Pa.) Call-Chronicle; O. W. Riegel, Washington and Lee University; Ralph B. Curry, Flint Journal. Nominated by the Scripps Estate: Edward J. Meeman, Memphis Press-Scimitar; Ludwell Denny, Washington, D.C.; Charles E. Scripps, Cincinnati, Ohio (Vice President and Chairman of Executive Committee).

Staff—Director: Watson Davis. Assistant Director: Dorothy Schriver. Writers: Ann Ewing, Elizabeth Hall, Faye Marley, Elizabeth Mirel, Barbara Tuffy, Judith Viorst, Walter Wingo, Ruby Yoshioka. Science Youth Division: Joseph H. Kraus, Leslie V. Watkins. Photography: Fremont Davis. Production: Priscilla Howe, Marcia Nelson. Conferences: Forrest L. Snakenberg. Librarian: Margit Friedrich. Interlingua Division in New York: Alexander Gode, 80 E. 11th St., Gramercy 3-5410. Advertising Manager: Fred A. Moulton, Metropolitan 8-2562, Washington, D.C.