

Sinhala Combative, Field and Aquatic Sports and Games", published by the National Museums, that all these activities flourished in Ceylon even many centuries ago (Pp. 51+5 plates. Colombo: Department of National Museums, 1959. Rs. 2.00). The illustrations are delightful, and it is perhaps surprising to see that when wrestling the pulling of one's opponent's long hair was permissible. In one illustration this is being done by the hands, in another by the feet. Besides wrestling there are accounts of combats between men and animals, and also bull-fighting and cocking. Hunting, falconry, horse racing and bull racing are mentioned, as well as a number of field and water games. Those keen on sports generally will be very interested to peruse this revised edition of Dr. Deraniyagala's important work.

#### Gyromagnetic Ratio of the Proton

IN order that all measurements of the intensity of the geomagnetic field, made by investigators and observers throughout the world, might be referred to the same fundamental physical constant, the following recommendations were made by the Association of Geomagnetism and Aeronomy, International Union of Geodesy and Geophysics, at the twelfth general assembly of the Union in Helsinki, Finland, during July 25-August 6: "The International Association of Geomagnetism and Aeronomy, considering the need for a universal agreement regarding the value of the gyromagnetic ratio of the proton for measurements of the geomagnetic field, strongly recommends that, pending the agreement and specification by an appropriate international scientific organization of a final value, all measurements of the geomagnetic field with a proton free-precession magnetometer, using pure water as a proton sample, shall be based on the following value of the gyromagnetic ratio:  $2.67513 \times 10^4$  radians/gauss sec."

#### Classification of Mental Disorders

PSYCHIATRISTS disagree about the concepts on which a classification of mental disorders should be based; hence the many classifications, and the frequent description of the same or similar conditions under a confusing variety of names. The effect of this diversity of classifications has been to defeat attempts at comparing psychiatric observations and the results of treatment in different countries, or even in different centres of the same country. In recent years the epidemiological approach to mental disorders has been more and more employed. To be used successfully and on a wide scale such an approach requires a common basic terminology and classification. As a first step towards this, Prof. E. Stengel, of the University of Sheffield, has examined the classifications in current use ("Classification of Mental Disorders", by E. Stengel. Offprint from *Bull. World Health Org.*, 21; 1960. 3s. 6d. 0.60 dollars. Sw. Fr. 2). He shows that some of the difficulties created by present-day lack of knowledge are surmountable by the use of "operational definitions", and outlines the basic principles on which a generally acceptable international classification could be constructed.

#### Tissue Injury by High-frequency Electric Current

IAN K. BUCKLEY, of the Department of Pathology, University of Melbourne, has employed high-frequency current to produce minute injuries to selected blood vessels within Sandison-Clark rabbit ear-chambers. There are two principal findings, which he outlines in the June edition of the *Australian Journal*

of *Experimental Biology and Medical Science*. First, at the surface of injured endothelial cells, transparent blister-like structures appear which, after increasing in size, separate from the cell as transparent globular bodies, floating freely in the plasma. He concluded that these structures are produced by the damaged endothelial cells. Secondly, the area of vascular damage apparent within 1 hr. of injury is increased five-fold by 24 hr. It is suggested that the initially injured cells may release diffusible chemical factors which secondarily injure the surrounding endothelial cells. Alternatively, or perhaps additionally, this phenomenon may be due to initial latent cell injury which only gradually becomes visible with the passage of time. Further consequences of cellular injury were the very rapid formation of cytoplasmic vacuoles by some cells and the active migration of granular leucocytes to the site of the injury. Leucocyte accumulation under these conditions strongly suggests a chemotactic effect by products of injured cells.

#### Blast Disease of Oil Palm

IN Central and West African oil palm (*Elaeis guineensis*) growing regions, a severe nursery root disease, occurring at the end of the rainy season and known as 'blast', has caused serious losses and dislocation of field planting schedules during recent years. The diagnosis of the disease has proved to be difficult and troublesome. J. S. Robertson, of the West African Institute for Oil Palm Research, Nigeria, has now attributed the disease to the co-infection of roots by a species of *Pythium* and *Rhizoctonia lamellifera* (*Trans. Brit. Myc. Soc.*, 42. 401; 1959). The leaf and root symptoms of blast disease are described. Isolations from roots in an advanced state of decay yielded *Rhizoctonia lamellifera*, whereas isolations from primary infections yielded a *Pythium* species. Inoculation experiments are reported which demonstrate that typical blast symptoms develop only when a mixed inoculum of *R. lamellifera* and *Pythium* sp. is employed. A laboratory experiment showed that *R. lamellifera* is capable of parasitizing the *Pythium* species.

#### National Certificates in Biology

IN view of the increasing measure of support for courses leading to the award of endorsed certificates in biology, and of the growing importance of this subject in industry and public services, the Secretary of State for Scotland and the Institute of Biology have agreed that the stage has been reached at which a national scheme in Scotland should be introduced. They have accordingly decided to appoint a joint committee, representative of the Institute and the Scottish Education Department, to receive and approve schemes for Ordinary and Higher National Certificates in biology. This is discussed in a recent issue of the *Journal of the Institute of Biology* (7, No. 3; July 1960). The Joint Committee is preparing instructions supplementary to those already provided for other National Certificates for the guidance of colleges wishing to submit schemes. Copies of these instructions may be obtained on application to the Joint Secretary, Joint Committee for Biology, Room 365, St. Andrew's House, Edinburgh 1.

#### The Tarlton Rayment Collection of Australian Insects

MR. TARLTON RAYMENT recently donated his collection of Australian bees, wasps, thrips and mites to