

*Brute, Pertes par Respiration et Production Nette dans la Forêt Ombrophile Tropicale.* Par D. Müller et Jürgen Nielsen. Pp. 69–160, illus. *Det. Forstlige Forsøgsvaesen I.* Danmark, 1965). Field measurements were made in 1955, 1957 and 1960, in two sample plots measuring 30 m × 30 m and 40 m × 40 m. Altogether there were 209 trees of more than 3 cm diameter breast height but 58 per cent belonged to 5 of the 45 species represented. All the trees in the smaller plot were felled after the 1955 measurements, care being taken first to clean a sufficient area so that the entire crowns fell on places where it was possible to collect all the leaves from the sample trees. In the larger plot basal areas, form factors, volumes and current annual increments were calculated from diameter and height measurements. Other data provided statistics for the branch percentage, loss of dry matter by respiration, surface area and weight of leaves, leaf-fall and photosynthetic efficiency. Special attention is given to the occurrence of 'light' leaves and 'shade' leaves which is a characteristic shared by deciduous trees of temperate and tropical forests, but dominants in the latter tend to have 'light' leaves only and it is suggested that this is why their crowns are usually small. In this particular example the net production of dry matter came to 9.0 metric tons per hectare per annum (roots, stems and branches) but the gross production was 52.5 metric tons per hectare per annum. It is interesting to note that although the production of dry matter is only very slightly less than for an even-aged beech forest in Denmark, the gross production is more than twice. Indeed, it is a characteristic of lowland tropical high forest that there is a large gross production and a great loss of dry matter by respiration in the stem, branches and leaves. This is a most welcome contribution to the subject of production ecology and the authors have provided useful data. Perhaps the exercise also demonstrates the difficulty of taking an adequate sample in tropical high forest and yet keeping the work within the realm of practical possibility. For example, familiar dominants of the tropical high forest of West Africa are absent from the tree lists given. In the smaller plot, the second largest tree by diameter (63.6 cm) and in height (27 m) is *Turraecanthus africanus*, which is not a typical emergent of this forest. The tallest tree recorded from both plots is 50.2 m and only two others reach 40 m or more.

### Elementary Particle Physics

FOLLOWING the review of *Group Theoretical Concepts and Methods in Elementary Particle Physics* (*Nature*, 207, 118; 1965), Messrs. Gordon and Breach, Science Publishers, Inc., have written to the Editor, stating that two prices are available for this book. There is a professional edition published at 14.50 dollars, and a reference edition published at 21.50 dollars.

### Announcements

THE Wellcome Laboratories of Tropical Medicine which since 1934 have been housed in the Wellcome Building, Euston Road, London, have moved to new laboratories on the site of the Wellcome Research Laboratories at Langley Court, Beckenham, Kent.

WITH the July 1965 issue, the *Bulletin of the Libraries of Commerce, Science and Technology* of the Sheffield City Libraries takes a new style and arrangement (No. 1, July 1965. Pp. 18. Sheffield: Sheffield City Libraries, 1965). While continuing to notify accessions, with the exception of some pamphlets and miscellaneous material, the *Bulletin* will now announce any developments within the libraries affecting readers and users of their services. The present issue includes a list of directories and also a list of recent metallurgical reports.

OPEN days will be held at the Tropical Products Institute during October 14–15. Further information can be

obtained from the Director, Tropical Products Institute, 56–62 Gray's Inn Road, London, W.C.1.

A CONFERENCE on "Technology and Society" will be held in Bath during October 14–16. Further information can be obtained from Mr. J. H. Lamble, Bristol College of Science and Technology, Ashley Down, Bristol 7.

THE third INTERKAMA Exhibition and Congress will be held in Düsseldorf during October 13–19. Further information can be obtained from Nordwestdeutsche Ausstellungsund Messe-Gesellschaft m.b.H., 4 Düsseldorf 10, Postfach 10203.

THE Arthur Stanley Eddington Memorial Lecture for 1965, entitled "The Brain and the Unity of Conscious Experience", will be delivered by Sir John Eccles in Cambridge on October 15. Further information can be obtained from W. B. Harland, Sedgwick Museum, Cambridge.

A SYMPOSIUM on "The Future Pattern of Research in Instrument Technology", arranged by the Tees-Side Section of the Society of Instrument Technology, will be held at Middlesbrough on October 14. Further information can be obtained from Mr. G. F. Shute, 10 Mayberry Grove, Linthorpe, Middlesbrough, Yorkshire.

THE ninth conference on "Analytical Chemistry in Nuclear Technology", sponsored by the Analytical Chemistry Division of the Oak Ridge National Laboratory, will be held in Gatlinburg, Tennessee, during October 12–14. Further information can be obtained from C. D. Susano, Oak Ridge National Laboratory, P.O. Box X, Oak Ridge, Tennessee 37831.

AN international conference on "Dynamic Stability of Structures", sponsored jointly by the U.S. Air Force Office of Scientific Research and Northwestern University, will be held in Evanston, Illinois, during October 18–20. Further information can be obtained from Prof. George Herrmann, Technological Institute, Northwestern University, Evanston, Illinois.

THE annual meeting of the Conference on Electrical Insulation of the National Academy of Sciences—National Research Council will be held at Buck Hill Falls, Pennsylvania, during October 25–27. Further information can be obtained from Mr. D. W. Thornhill, Conference on Electrical Insulation, National Academy of Sciences, 2101 Constitution Avenue, N.W., Washington, D.C.

CORRIGENDUM. In the article entitled "Environmental Determination of Insular Variation in Bird Species Abundance in the Gulf of Guinea" by Prof. T. H. Hamilton and N. E. Armstrong, which appeared on p. 148 of the July 10, 1965, issue of *Nature*, the following corrections should be made: (1) Second paragraph, line after equation (4) should read: "where  $z \neq 1$ " (not ' $x \neq 1$ '). (2) Third paragraph, thirteenth line, should read: "estimate the radius . . . as 7.25 miles" (not '. . . as 7 . . .'). (3) Third paragraph, seventeenth line, should read:

$$". . . \pi r \sqrt{r^2 + h^2}" \text{ (not } '\pi r \sqrt{r^2 - h^2} \text{ ')}$$

CORRIGENDUM. In the communication entitled "Radiochemical Determination of the Endogenous and Exogenous Respiration of Bacterial Spores" by H. Desser and Prof. E. Broda, which appeared on p. 1270 of the June 19, 1965, issue of *Nature*, line 33 should read ". . . The specific activities were up to  $6.6 \times 10^3$ ". Also, H. Desser and Prof. E. Broda thank Prof. H. O. Halvorson, Madison, for the gift of *Bacillus cereus* and for advice on its cultivation.

ERRATUM. In the communication entitled "Benzene-sulphonylcarbarnates: New Herbicides" by Helen J. Cottrell and Dr. B. J. Heywood, which was published on p. 655 of the August 7, 1965, issue of *Nature*, the first reference should read as follows:

<sup>1</sup> Carpenter, K., Heywood, B. J., Parnell, E. W., Boesch, R., and Mcivier, J., Brit. Pat. Appln. 32407/61, and Brit. Pat. Appln. 8905/63.