

small amounts of DDT give effective control of the grass grub has resulted in it being kept well under control in most parts of the country; as a pest, the grass grub has previously cost New Zealand some £6 million a year. Damage done by the white butterfly and the diamond black moth has been reduced to a low level by the introduction of their natural predators, and a safe and effective hormone-fungicide spray has been developed for control of grey mould or botrytis on tomatoes, while acceptable methods of spray application of diphenylamine have been developed which are expected to reduce scald of apples in storage to negligible proportions. Savings in thinning costs of Statesman apples, estimated at £20,000 a year, have been obtained by the introduction of hormone sprays, and the short-rotation rye-grass developed by the Grasslands Division is now valued at £150,000 a year in seed alone, while Savoy cabbage strains bred by the Crop Research Division are yielding about 2.5 tons per acre more than the best commercial strains and are superior in uniformity and time of maturity. Between 1948 and 1960 the yield of tobacco leaf per acre was raised from 789 to 1,856 lb. with a simultaneous improvement in quality, and the study of curing conditions in the kiln has led to the use of a down-draught kiln which gives more uniform curing, reduces fuel consumption by one-third and drying time by 24 h.

The Secretary's report also mentions the Soil Bureau's discovery of the importance of molybdenum as well as fluorine in connexion with dental caries, which could have a profound effect on the condition of children's teeth. Of the present research work, the report notes that the study of foraminifera is well advanced in New Zealand and that the Geological Survey's palynologists were

called on to examine fossil pollen samples from coal-bearing strata penetrated by the drills. Field trials have shown that the high-temperature Geiger tubes developed within the Institute of Nuclear Sciences can operate for long periods in the geothermal bores at Wairakei and that the counters can detect small differences in the radioactivity of the rocks and aid the correlation of the geological strata from hole to hole. A design procedure that permits an estimate of the safety of any proposed building and its occupants if subjected to earthquake has now been developed to an intermediate stage and results of the study of a number of standard buildings have been issued in a handbook. A method has been devised to assist the diagnosis of heart defects consisting of an abnormal connexion between the chambers of the right and left sides of the heart in which a sample of dye is rapidly injected into the blood stream at a selected site and afterwards detected downstream from the injection. A detailed study of clay fractions from different horizons of 54 soils has been made with the electron microscope and by chemical and mineralogical analysis. Reported sulphur deficiencies in New Zealand soils appear to be confined to soils with a very low absorbed sulphate content and a low absorption capacity, so that added sulphate is not retained in competition with phosphate, and when the two anions are added together, as in superphosphate, the sulphate is rapidly leached from the soil. Work on oestrogenic substances in red and subterranean clover has confirmed that the activity of red clover can affect the reproductivity of grazing cows and has provided a basis for investigating the heritability of oestrogens in clover progenies. Bitter pit in Cox's Orange and Golden Delicious apples has been reduced by calcium nitrate sprays.

## NOMENCLATURE OF ISOLATES OF VIRUS FROM TRACHOMA AND INCLUSION BLENNORRHEA

AT an informal meeting following the New York Academy of Sciences symposium on "Biology of the Trachoma Agent" in May 1961, an *ad hoc* committee was formed to try to establish a uniform system of nomenclature for trachoma virus isolations. The various institutions represented by the committee members are: Prof. J. H. S. Gear, the South African Institute for Medical Research, Johannesburg; Dr. F. B. Gordon, Naval Medical Research Institute, Bethesda 14, Maryland; B. R. Jones, Institute of Ophthalmology, London, W.C.1; Dr. S. D. Bell, jun., Harvard University School of Public Health, Boston 15, Massachusetts (chairman of the committee).

At the eighth International Congress of Microbiology, held during August 1962, the committee presented the views of the majority of persons interested enough to communicate their thoughts on the subject. The final recommendations which were voted by those present at Montreal followed the system proposed by Dr. Leslie Collier in almost all respects. The elements are as follows:

(a) (b) (c) (d) (e)

*TRIC*/antigenic group/country or State/number/origin

(a) The term *TRIC* refers to the trachoma-inclusion conjunctivitis group of viruses.

(b) This space would be left blank or can be filled in when this information is available.

(c) The country or state from which this specimen was obtained is to be designated by the internationally recognized automobile plate letters, with such further geographic designation as is necessary for clarity.

(d) If this system can be administered by a central agency such as the World Health Organization, sequential

numbering following the country of origin is favoured. If no central agency is available, it was thought best to insert a laboratory designation before the number.

(e) The origin of the clinical material would be inserted here as follows with the *O* or *G* optionally followed by a *T*, *C* or *N*: *O* = from the eye, *G* = from the genital tract, *T* = diagnosis of trachoma, *C* = diagnosis of conjunctivitis, *N* = diagnosis of ophthalmia neonatorum.

The full designation of the *G*-1 strain<sup>1</sup> therefore would be: *TRIC*/|*WAG*/*MRC*-1/*OT*. *WAG* = West Africa Gambia, *MRC* = Medical Research Council.

Similarly the nomenclature for the *SA*-2 strain<sup>2</sup> assuming acceptance of the immunological groups proposed at present would be: *TRIC*/2/*SAU*/*HAR*-2/*OT*, *SAU* = Saudi Arabia, *HAR* = Harvard, and the strain of inclusion conjunctivitis<sup>3</sup> now called *IC-Cal*-1 would be: *TRIC*/|*USA-Cal*/*Cal*-1/*ON*.

Whether or not strains already isolated should be incorporated into this system is left to the individual laboratories concerned, but the *ad hoc* committee feels that in the interests of uniformity and ease of communication, it is desirable that all new isolates should be officially designated by the above system as from January 1, 1963, onward.

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<sup>1</sup> Collier, L. H., and Sowa, J., *Lancet*, i, 993 (1958).

<sup>2</sup> Bell, jun., S. D., Snyder, J. C., and Murray, E. S., *Science*, **130**, 626 (1959).

<sup>3</sup> Hanna, L., Zichosch, J., Jawetz, E., Vaughn, jun., D. G., and Thygeson, P., *Science*, **132**, 1660 (1960).