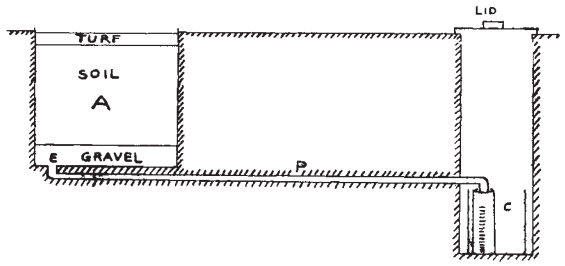

A layer of gravel is put at the bottom of the 'evapotranspirometer' (*A*) and the outlet (*E*) is covered by a small-meshed copper screen. Soil of a light, friable nature, which permits free drainage and water circulation, is placed in the tank (*A*) where, for general purposes, grass should be grown. A suitable procedure is to install the apparatus in a level field of grass so that the sod removed during installation can be replaced in the tank after the soil there has had time to settle. The area immediately surrounding the apparatus should be kept well watered so that the micro-climate above the tank and its surroundings is as nearly similar as possible.

I installed an apparatus of this type in July 1951 at the Johns Hopkins Laboratory of Climatology, Seabrook, New Jersey. It measures potential evapotranspiration by a very simple process. A known amount of water is applied to tank (*A*) and the drainage is collected in the overflow (*C*). Potential evapotranspiration thus equals the amount of water applied plus precipitation, less the amount collected in the overflow. The amount of water applied to the tank and collected in the overflow can be converted easily to inches or millimetres of 'precipitation' as required. This principle is the same as that used for the more elaborate installations already at Seabrook, against which the new apparatus has been tested with satisfactory results. It can be read like a rain-gauge and, if erected at existing climate stations in different parts of the world, would add very little in expense or observational time, since only one reading a day is required. In this way it could be used in many areas to provide an indication of a climatic factor well worth more attention.

B. J. Garnier

University College,
Ibadan, Nigeria.
Feb. 9.

[1] See various articles by C. W. Thornthwaite, especially "An Approach towards a Rational Classification of Climate", *Geog. Rev.*, 38, No. 1, 55 (Jan. 1948) and "Climate and Moisture Conservation", *Ann. Assoc. Amer. Geog.*, 37, No. 2, 87 (June 1947).

A New Serological Division of *Staphylococcus aureus* Bacteriophages: Group *G*

The bacteriophages lysing *Staphylococcus aureus* have been divided by Rountree[1] into five serological groups, designated *A*, *B*, *C*, *D* and *F*. Phages of groups *A*, *B* and *F* were isolated from lysogenic staphylococci from human sources.

Three phages have been received in this Laboratory that are not neutralized by anti-sera of any of Rountree's groups. Each of these three phages is neutralized by an anti-serum prepared against one of the three, and this anti-serum fails to neutralize phages of the groups *A*–*F*. We refer to this new serological group as Group *G*.

The three phages are numbered 65, 66 and 68 in our collection. The first two were isolated by Dr. Wallmark of Stockholm using the cross-culture technique of Fisk[2], and are referred to as 155 and 166 by him[3]. The third phage, known as 68, was received from Dr. Wahl of Paris, and had appeared as a variant of one of the phages, 44*A*, used for the routine typing of staphylococci[4].

Like the phages of groups *A*, *B* and *F*, these three phages lyse only coagulase-positive staphylococci; but they differ from these groups in lysing a greater variety of strains. Undiluted filtrates of all three lyse most coagulase-positive staphylococci; at their routine test dilutions the phages lyse about 40 per cent of a mixed group of strains, including strains of all the three major groups defined in routine phage typing and some strains not lysed by any of the typing phages. Because of the number of strains lysed, the group *G* phages are not used for phage-typing in this laboratory.

The plaque-size of these phages is often variable on a single culture; small clear, or indistinct, plaques may be mixed with larger plaques that are often surrounded by a halo. When picked and plated the phages giving these different plaques do not generally breed true.

Phages of group *G* may be readily propagated to high titre on nutrient agar, or in broth. In this respect, and in their wide lytic range, they resemble the phages of serological group *D*.

Joan E. Rippon

Staphylococcal Reference Laboratory,
Public Health Laboratory Service,
Colindale Avenue,
London, N.W.9.
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[1] Rountree, Phyllis M., *J. Gen. Microbiol.*, 3, 164 (1949).
[2] Fisk, R. T., *J. Infect. Dis.*, 71, 153 (1942).
[3] Wallmark, G., *Nord. Med.*, 41, 806 (1949).
[4] Wilson, G. S., and Atkinson, J. D., *Lancet*, i, 647 (1945).

Nupserha bicolor Thoms., subsp. *postbrunnea* Breun.: a New Pest on Jute (*Corchorus olitorius* Linn.)

Das[1] recently compiled a list of insect and mite pests of the two cultivated species of jute, namely, *Corchorus capsularis* and *Corchorus olitorius*. A pest, hitherto unrecorded in India, was detected in *olitorius* jute during 1949 on the farm of the Jute Agricultural Research Institute, and was identified by the Commonwealth Institute of Entomology, London, as *Nupserha bicolor* Thoms., subsp. *postbrunnea* Breun. The pest has since been found to be an important one for all the varieties of *C. olitorius*, while the *capsularis* varieties show resistance to it.

The pest has special economic importance, as it causes an immediate loss of a considerable portion of the stem. The ovipositing female cuts two rings around the stem with its sharp mandibles at two different levels, 0·7–2·7 cm. apart, with highest frequency between 1·0–1·4 cm. A slit is cut between the rings down to the pith tissue for oviposition. This causes withering and ultimate death of the apical plant region above the lower ring.

From our observations, it is presumed that the seat of oviposition chosen has a direct relation to the ratio of the length of mandibles of the laying female