

ingestion of the infective particle. This phenomenon strongly recalls the uptake by cells of colloidal dyes, and may therefore be termed 'viropexis'. Enzymic activity and destruction of receptors—formerly postulated as prerequisites for the penetration of the virus into the interior of the host cell—do not seem to be essential, though possibly the invariable occurrence in natural infections with enzyme-possessing viruses.

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¹ Fazekas de St. Groth, S., *Aust. J. Exp. Biol.* (in the press).

² Fazekas de St. Groth, S., and Graham, D. M., *Aust. J. Exp. Biol.* (in the press).

³ Hirst, G. K., *J. Exp. Med.*, **87**, 301 (1948).

⁴ Hirst, G. K., *J. Exp. Med.*, **76**, 195 (1942).

⁵ Burnet, F. M., *J. Path. Bact.*, **38**, 285 (1934).

Polyplody in Bacteria?

IN the course of experiments on the bactericidal action of X-rays on the *R* and *S* phases of *Escherichia coli*, it was found that the survival-rate in three stocks (76, 111, *Ida*), irradiated twenty-four hours after seeding, was different¹; one of them (stock *Ida*) was more resistant to the radiation as compared with the other two stocks. No significant differences were found between *S* and *R* phases of the same strains. According to the hit-theory of biological effects of radiation the survival-rate is a measure of the target volume, which has been assumed to represent the bacterial 'nucleus'^{2,3}. If in the case of bacteria the so-called nucleoplasmic ratio of plants and animals holds true, and if, on the other side, the target volume obtained from X-ray experiments really represents the size of the bacterial 'nucleus', one would expect the size of the bacterial cells to be correlated to the target volumes. A biometric analysis of twenty-four hours old bacteria, carried on the projected images of photomicrographs of bacteria stained with Henrici's Congo Red method⁴, has shown that *E. coli* with a larger target volume are larger than the ones with smaller target volume. The variability curves obtained for the three stocks were almost normal, and the differences found between their means were statistically significant. It is suggested that such correlation might indicate the presence of polyplody among different stocks of the same bacterial species, as it has previously been found in other organisms. A detailed description of such experiments will be published elsewhere.

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¹ Buzzati-Traverso, A., Cavalli, L. L., and Visconti di Modrone, N., *Rivista di radiologia*, **1**, 43 (1947).

² Jordan, P., "Die Physik und das Geheimnis des organischen Lebens" (Braunschweig, 1941).

³ Lea, D. E., "Actions of Radiations on Living Cells" (Cambridge, 1946).

⁴ Henrici, A. T., "Morphologic Variation and the Rate of Growth of Bacteria" (London, 1928).

Occurrence of *Talorchestia brito* on the Coast of Northumberland

Talorchestia brito was originally described by Stebbing in 1891 from specimens collected on the north Devon coast¹. No further records of its occurrence on the coasts of Britain can be found, though, according to Chevreux and Fage², it has been recorded from a number of scattered points on the Continent from the eastern English Channel to the western Mediterranean. It has now been found about three hundred miles north of any previous record near Blyth, Northumberland, being moderately common between high-water neap and high-water spring tides in the coarse sand to the south of the town. The species appears to be restricted to this stretch of about two miles, and has not been found on any other sandy beach in Northumberland or north Durham.

On July 6, 1948, the population of *T. brito* consisted of adults, including females carrying eggs, and recently hatched young. *Talitrus saltator* was also present, but was much less abundant.

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¹ Stebbing, T. R. R., *Ann. Mag. Nat. Hist.*, (6), **8**, 324 (1891).

² Chevreux, E., and Fage, L., *Faune de France*, **9**, Amphipodes (1925).

Laminaria ochroleuca De La Pylaie Growing on the Coast of Britain

ON April 10, 1946, a *Laminaria* plant, trawled in Plymouth Sound and brought into the Plymouth Laboratory by Miss M. F. Sutton, Department of Biology, Chelsea Polytechnic, was identified by me as *Laminaria ochroleuca* De La Pylaie, a species of *Laminaria* that had not previously been recorded from the coasts of Britain. As trawling over the same ground on subsequent days failed to procure further plants of this species, the record was not published. A recent survey, however, has shown that this species occurs quite frequently in the more sheltered parts of Plymouth Sound. It is found on rocky ground from just below, down to eight metres below, low water spring tides, growing usually with *L. cloustoni* Edmondst. or *Saccorhiza bulbosa* De La Pylaie.

L. ochroleuca can be distinguished at any time of the year from *L. digitata* (L.) Lamour. and *L. cloustoni* Edmondst. by the colour of the base of the frond, which is always whitish-yellow, and by the smooth stipe which contains mucilage canals in the outer layers. During the spring and early summer, when frond growth is very rapid, the whole frond is a pale yellowish-brown; but during late summer, autumn and early winter, when growth is slower, the distal part of the frond becomes darker, the distinguishing whitish-yellow colour being noticeable only at the base.

L. ochroleuca (= *L. lejolisii* Sauvageau, *L. pallida* (Grev.) J. Ag. var. *iberica* Hamel, *L. iberica* (Hamel) Lami) is recorded from the western Mediterranean and from the north-eastern Atlantic. On the French side of the Channel it is recorded at localities from Finistère to Cotentin. There are also records of its occurrence in the Channel Islands.

Dr. Robert Lami, of the Muséum d'Histoire Naturelle, Paris, who has worked on the distribution