Strain	Medium	Colony size (mm.)	No. of colonies studied	Average number of papillæ per colony	Poisson probability of drawing similar sample
K12	Endo	5·5	35	1·3	0·4
	Lactose–galactose	2·2	68	1·5	0·01
		2·4	25	2·3	0·5
ML	Endo	3·4	35	10·0	0·5
	Lactose–galactose	2·2	55	2·0	0·4
		2·4	34	2·9	0·7
		2·5	20	3·0	0·07

not a function of bacterial divisions but of absolute time[12], and if the rate of growth of the culture gradually slowed down. This is not likely since, under the conditions of these experiments, the rate of growth is constant almost to the moment of arrival at the stationary phase. Nevertheless, the rate of mutation could change with time for some other reason. Furthermore, there are a number of probable situations, such as sexual recombination, selection for or against the mutant, delay in the expression of the phenotype and the segregation of the mutant nucleus from the multinucleate bacterium in which the mutation occurred, that would be inconsistent with the assumptions made by Lea and Coulson regarding the events taking place after the mutation. Thus it does not seem as strange that *K*12 bacteria do not obey the distribution as it is surprising that the *lac*$^+$ mutants of strain *ML* were distributed in accordance with the simple assumptions of Lea and Coulson.

In any event, it is evident that failure to fit the Lea and Coulson distribution is not sufficient evidence that the change being studied is not due to a randomly distributed mutation. Furthermore, it should also be apparent that, in cases where the distribution is not followed, calculations of the mutation-rate from numbers of mutants by the usual methods would be in error.

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An Experiment in Marking the Grey Seal *Halichœrus grypus*

THE Farne Islands are the only breeding station of the grey seal *Halichœrus grypus* on the east coast of Great Britain, and most authorities, including the late T. Russell Goddard, have, in the past, believed that the majority of these seals remained within a comparatively short distance of the islands throughout the year. It was recognized, however, that an occasional individual might, from time to time, travel considerable distances up or down the coast.

Recently, Ian M. Telfer and I carried out some experiments in tagging young seals in the hope that, although there would of necessity be only a small percentage of recoveries, one or two might be recovered and these would furnish information not only about the movements of the seals, but also the age to which they may attain.

The tag we finally used is based on the cattle ear-tag found by Scheffer to give the most satisfactory results on the fur seal *Callorhinus alascanus* of the Pribilof Islands. It is made of stainless steel and the dimensions before folding are $\frac{3}{8}$ in. × 5 in., $\frac{1}{2}$ in. of this last measurement being an overlap. The finished article is roughly elliptical, being rounded at one end and tapering to an overlap, such as is used on British Trust for Ornithology G.H. clips, at the other end. A slit is made in the membrane of one of the hind flippers and the tag is placed over either the first or fifth digit and is then closed with pliers. Each tag is engraved with the words "Inform Hancock Mus. Newcastle/Tyne" and carries a serial number.

The breeding season at the Farnes starts at the end of October, and we had planned to make a number of visits to the islands during the late autumn and early winter of 1951. Unfortunately, a succession of west and south-west gales prevented this, and it was not until December 16 that we were able to land on Staple Island, one of the Outer Group, on which there were, on that day, approximately 170 live calves. Most of these were too big to handle, but we tagged ten, Nos. 1–10. Of these, Nos. 1, 2 and 6 were changing coat, No. 7 was two to three days old, and the remainder were in the first coat and were probably between seven and ten days old.

On December 30, 1951, the animal bearing tag No. 1 was found on the beach at Jæren, about 35 km. south-west of Stavanger, Norway. The weather was very stormy, but the seal appeared to be perfectly healthy; and the finder hoped to release it when the weather improved.

In view of the interesting result of this initial experiment, it is to be hoped that conditions will be favourable during the forthcoming autumn and that it will be possible to mark a considerably larger number of calves.

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Antagonistic Action of Certain Stereoisomers on the Plant Growth-regulating Activity of their Enantiomorphs

IT has been recently demonstrated that the two stereoisomeric forms of certain α-aryloxypropionic acids can differ widely in their capacity to induce growth responses in plants. Thus, for example, the (+)-forms of α-(2-naphthoxy)-, α-(2 : 4-dichlorophenoxy)- and α-(2 : 4 : 5-trichlorophenoxy)-propionic acids possess high growth-regulating activity, whereas the (−)-isomers possess only negligible activity. The (±)-acids give an intermediate response in the tests employed[1,2].

These observations are consistent with the view that combination occurs between the molecules of the active enantiomorph and some optically active cell constituent, resulting in the initiation of a growth response. We have put forward a second hypothesis