Organisms of this type are widely distributed and occur commonly on vegetables, and their presence on shelled peas is to be expected. Since they are not spore formers, it is noteworthy that they withstand a temperature of 15° F. for over 2 years. While no peas stored at minus 5° F. for more than a month have to date been analyzed, the lactobacilli in all probability would persist at this temperature, for experience has shown that micro-organisms generally tolerate zero Fahrenheit as well as or better than higher freezing temperatures.

JAMES ALEX. BERRY
U. S. BUREAU OF PLANT INDUSTRY
SEATTLE, WASHINGTON

VITAMIN A IN THE PIMIENTO PEPPER

THE pimiento pepper is utilized in the culinary art chiefly as a condiment. This rather limited use in the diet may perhaps be an explanation for the relative paucity of research concerning its food value.

MacLeod and Booher[1] report that the vitamin C content of the canned product is equivalent to that of fresh grapefruit, and analyses have determined its chemical composition.[2] Capsanthin, or an allied pigment so masks any other color present in the pepper that it seems expedient at this time to call attention to its high carotene content.

In the biological study the Sherman technique was followed. Rats varying from 40 to 50 grams at weaning were put upon his vitamin A-free diet until symptoms of depletion were manifest, *i.e.*, signs of ophthalmia and stationary or slightly declining weight. Fresh, commercially canned and dried pepper were each then fed upon three different levels with an average of eighteen animals in the several groups.

This preliminary investigation has shown that, computed upon the dry basis, four milligrams of pepper induced a growth response above that of the Sherman unit. Further, a chemical assay has indicated from 200 to 300 mg of carotene per kilogram of the dried material. Work is in progress to establish the unit level for the pimiento pepper and to ascertain its carotene value.

LEAH ASCHAM
GEORGIA EXPERIMENT STATION

EARTHQUAKES IN THE HOLY LAND: A CORRECTION

IN an article on earthquakes in the Holy Land[1] there is given a list of 207 shocks, of which there is record, between the years 1606 B. C. and 1927 A. D. Among these are 27 dates from an Arabian authority, As-Soyuti, whose work appears in translation in the *Journal of the Asiatic Society of Bengal.* In transcribing these dates I failed to observe that they were stated as A. H., *i.e., Anno Hejira,* instead of *Anno Domini.* They are, therefore, as quoted in my list something over six centuries too early. The corrected dates are as follows:

A.H.	A.D.	A.H.	A.D.	A.H.	A.D.
94	712	434	1042	552	1157
98	716	455	1063	565	1169
130	747	460	1067	575	1179
220	835	462	1069	578	1182
233	847	479	1086	597	1200
242	856	484	1091	600	1203
245	859	532	1137	702	1302
393	1002	538	1143	791	1388
425	1033	551	1156	889	1484

Inasmuch as the Hejira dates from July, 622 A. D., and there are adjustments of the calendar dates for fractions, these figures may be off one year. It is also probable that the original dates are approximate. Hence where As-Soyuti differs by a year from others given in the list as published, one shock only is presumably meant.

In this connection I would call attention to a very ancient, yet definite observation regarding the now well-known earthquake fault that traverses the eastern slope of the Mount of Olives:

> And His feet shall stand upon the Mount of Olives which in that day is before Jerusalem on the east; and the Mount of Olives shall be cleft in the midst thereof toward the east and toward the west, and there shall be a very great valley; and half of the mountain shall remove toward the north and half of it toward the south.[2]

Activity on this fault was the occasion of destructive tremors in 1927. That it was the scene of more obvious displacement some 2,500 years earlier we can not doubt in view of the graphic description of the Old Testament writer, although his identity and the exact date of his prophecy are matters of uncertainty, especially with reference to this particular passage.

BAILEY WILLIS
STANFORD UNIVERSITY

A RARE PUBLICATION

THE library of the Academy of Natural Sciences of Philadelphia recently acquired from a dealer in second-hand books a copy of Volume 1, 1892–94 (1895) of the Transactions of the Natural History Society of Queensland. The fact that this is not listed in the Union List of Serials and that the natural

[1] Grace MacLeod and Lela Booher, "The Antiscorbutic Vitamin Content of Some Preserved Foods," *Jour. Home Econ.*, 22: 588. 1930.

[2] J. G. Woodroof and J. E. Bailey, "Pimiento Peppers," *Ga. Exp. Sta. Bull.*, 150. 1929.

[1] *Bull. Seismol. Soc. Amer.*, Vol 18, 1928.

[2] The Old Testament, Zechariah, 14, 4–6, 520 B. C.