ity for a comparatively short time, especially in a moist warm climate. Bermuda onion seed, which is used largely in our southern states, often gives trouble from low germination, even when the seed is not more than a year old.

Samples from a number of lots of Bermuda onion seed imported from the Canary Islands were combined and dried at a low temperature in a partial vacuum to 6.4 per cent. moisture content in November, 1924. Portions of this seed were stored (*a*) in paper packets at room temperature in the laboratory, and (*b*) sealed in air-tight containers and stored part at room temperature in the laboratory and part in a cool chamber at a temperature ranging from 5° C. to 10° C.

The seed has been tested from time to time, with the results given in Table 1.

TABLE 1
GERMINATION OF BERMUDA ONION SEED AFTER STORAGE

Length of storage	Germination after storage in		
	Paper packet in room, per cent.	Sealed tube in room, per cent.	Sealed tube in cold chamber, per cent.
Check test	94	94	94
16 months	83	88	89
3 years	36	94	93
7 years	0	89	91
11 years	..	89	87
13 years	..	90	89

This small experiment illustrates strikingly the importance of maintaining a low moisture content in stored seeds if vitality is to be preserved.

In plant breeding work, it is important to maintain original stocks of seed over long periods for purposes of comparison. This is especially important in the case of annuals and biennials. It is entirely feasible to artificially dry small lots of seed and store them in air-tight containers to preserve their viability for relatively long periods. A like procedure is practical for the storage of commercial seeds of valuable strains.

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BACTERIA OF THE LISTERELLA GROUP ISOLATED FROM FOXES

THE recent report of Graham and his associates[1] on Listerellosis of cattle and sheep in Illinois has redirected our attention to an organism isolated in early June, 1937, from silver foxes from a nearby fur farm. The disease, which spread rapidly through the sheds, killing a considerable number of the young animals, was pronounced distemper by a prominent authority on fox diseases called into consultation by the attending veterinarian.

We did not learn much about the symptoms except that the animals became prostrate and were dead a few hours later. Examination of the internal organs revealed no significant changes. Heart's blood cultures from eight of the animals were made to beef heart infusion broth, and from five of them the cultures were positive. One of the positive cultures was from a very sick fox pup which was killed and the culture made immediately afterward. The organism, which was the same in all the cultures, is a slender gram positive even-staining rod in broth culture. Films made from blood agar slants show a gram positive rod similar in size, shape and arrangement to *Corynebacterium hoffmanni*. It is sluggishly motile. Doses of 0.5 cc of a 24-hour broth culture injected into each of two 400-gram guinea pigs proved fatal in two days with recovery of the organism from the heart's blood. Mice also proved susceptible.

The organism was considered to belong probably to the Listerella group. Dr. Graham has very kindly examined the culture and tentatively identified it as a "Listerella or Listerella-like type."

We have no evidence of etiological connection of this organism with this outbreak of disease among the foxes. We feel, however, that it must have had some significance, either as a primary or a secondary factor in the illness of those animals from which it was isolated.

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THE ANTI-MENORRHAGIC FACTOR OF MAMMALIAN LIVER FAT

FOLLOWING the introduction of oral liver extracts for the treatment of anemia it was observed by some physicians that some of these preparations were useful in controlling some cases of functional uterine bleeding (menstrual bleeding of prolonged or profuse nature, not due to benign or malignant tumors). Although the original purpose of the liver therapy was to treat the secondary anemia following this bleeding, there was often noted a diminution or cessation of the abnormal hemorrhage itself, even though the blood count was unaffected. This property was found in the cruder preparations but not in the highly purified oral or parenteral solutions. Since this purification involves no treatment likely to inactivate any constituent, the fraction in question was probably removed in the process. Inactive proteins and lipoids constitute much of the material removed in the purification of parenteral solutions.

Since 1936 we have been investigating the lipoid

[1] SCIENCE, August 19, 1938, page 171.