

investigation was conducted to see if cold storage at freezing point would help to preserve the viability of the immature embryos of corn and if so, for how long. A 3-week-old corn cob from an inbred stock, with husk intact, was placed in the refrigerator immediately after harvest on August 31, 1947. The embryos were dissected out of their kernels and daily tested for viability in Tukey's culture medium from the time the kernels were kept in the culture medium and continuing until the embryos showed no sign of viability. The kernels were plump at the time of keeping in the refrigerator. After five hours they had already shrunk at the bottom. A sort of dryage was evidently in progress. After a week they were distinctly shrunken. At the end of twelve days they had practically flattened out and the borderline of the embryo was clearly thrown out to view at the anterior surface of the kernel. At the end of sixteen days the seed coat had become as hard as that of a matured seed. Thereafter the dissecting out of the

embryo became difficult. Ten embryos were tested each time. They showed hundred per cent. viability till the sixteenth of October 1947. Thereafter there was a steady decline in the viability. None of the embryos kept on the 26th of October germinated, while only one out of ten excised on the 25th of October germinated. Hence the period of viability for a 3-week old embryo kept in cold storage at freezing point, appears to be approximately a month and a half. The period, however, may not be the same for older or younger embryos.

In the present investigation, however, the embryos were obtained from a single ear. To confirm the result, embryos should be tested from more than one ear and the test repeated.

Agri. Res. Institute,
Coimbatore,
January 19, 1949.

P. UTTAMAN.

1. Tukey, H. B., *Proc. Am. Soc. Hort. Sci.*, 1934, **32**, 313.

RESEARCH INFORMATION SERVICE

RESEARCH INFORMATION SERVICE, established translators of foreign scientific and technical material, have introduced a new and much-needed service by cataloguing and preparing translations of articles from *current Russian technical and scientific publications*.

Although Soviet presses pour out hundreds of magazines and reports covering an enormous range of subjects, the greatest portion of which are being imported into this country, only a very small percentage of this material has been of practical value heretofore because of the lack of qualified translators and the exorbitant cost of technical translations.

Pioneers in this field, Research Information Service has undertaken to catalog the material received in this country—comprising tons of printed matter on Russian scientific and industrial activity—and then to screen and translate and publish at reduced cost—at a fraction of the cost of "made-to-order" translations—that information which is of most immediate interest to American industry.

For this purpose Research Information Service maintains a staff of qualified linguists, editors and translators, trained expressly for scientific and technical work.

Translations immediately available—listed in Research Information Service Bulletin No. 27—deal with problems in the petroleum industry. The Bulletin lists translations on such subjects as *Problems of High-Speed Drilling, Problems and Methods of Medium-Speed Oil Products, Pressure Heads in Oil Bearing Formations and Rates of Flow, the Solubility of Natural Gas in Petroleum, the Boiling Temperatures of Olefins, Studies on the Inflammability of Gases, Convection and Inflammability in Ether-Air Mixtures*, etc.

At present the company is preparing Bulletins listing translations of articles in fields such as metallurgy, agricultural chemicals, medicine, aeronautics, machinery and several others. These Bulletins will be made available to industry in the very near future.

Special arrangements for translations of foreign language material now in the hands of individual companies can be made through the *Industrial Translation Division* of Research Information Service, whose sales-translation plan has already gained widespread acclaim.

Translations and Bulletins listing translations may be obtained from the publishers, Research Information Service, 509 Fifth Avenue, New York 17, N.Y.