

The surface represented in the graph and the accompanying equation appears, from a consideration of British temperatures (as recorded at Kew), to pass through the British Summer Standard (12 hr. storage at mean summer air temperature of 16° C., reduction time, 4½ hr.). However, the height of the surface can be conveniently altered by adjustment of the constant (7.2 in the above equation) to comply with any other standard.

Similar methods have been applied to data for the resazurin tests obtained on the same milks, thus permitting an accurate comparison of the time-temperature trends together with a comparison of existing British standards for both tests. Our data suggest, in fact, that the standard set for resazurin³ is appreciably lower than that for methylene blue⁴.

Furthermore, by taking account of data for the individual producers, it is possible to determine the degree of discrimination associated with each combination of time and temperature; so that the storage period can, within certain practical limits, be adjusted to obtain greater sensitivity in the test.

Other advantages of our approach might then be summarized thus. Comparable standards can be established for widely different conditions of production. A reasonable adjustment in acceptable reduction time can be made throughout the year according to temperature and time of storage, thus freeing the test of its present undue dependence on atmospheric temperature⁵. The length of time between production and testing can be allowed for in evaluating producers. The time-temperature effect can be related for several tests.

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¹ Morton, R. K., and Vincent, J. M., *J. Aust. Inst. Agric. Sci.*, **13**, 125 (1947).

² Smythe, V. R., *Queensland J. Agric. Sci.*, **2**, 128 (1945).

³ Great Britain, Min. Agric. and Fish.: Form C.158/TPY, 1943.

⁴ Great Britain, Ministry of Health, Memo. 139/Foods, 1937.

⁵ Mitchell, H. H., *Dairy Indust.*, **12**, 351 (1947).

Pregnancy Test using the Male Toad

THROUGH the kindness of the originator of the test, who forwarded us a supply of *Bufo arenarum* Hensel, we have recently been able to carry out the Galli Mainini male toad test for pregnancy.

Ten ml. of urine are injected into a lymph sac of the toad. It is important to note that the animals seem particularly susceptible to drugs in the urine. But apart from this fact, the urine samples need no special preparation. The appearance of spermatozoa in the urine, which constitutes a positive result, is observed by low-power microscopic examination of a drop or two obtained by a pipette from the cloaca. We have found the test to be positive in 2-4 hr., depending on the time of examination. In some cases, a positive result occurs in one hour and the amount injected may be reduced to 5 ml. Within 20-24 hr., re-sampling of the urine shows either absence of spermatozoa or fewer and non-motile spermatozoa. The temperature averaged 22° C. during the tests.

In a consecutive series of fifty inoculations, we have encountered no false positive and only one false negative. This latter may be explained on the basis that the urine sample was abnormally dilute. The series included gonadotrophins, cases of confirmed pregnancy, incomplete abortions, uterine fibroids, secondary amenorrhoea and normal women.

Over a limited series, we have confirmed claims made for this test by Galli Mainini¹, Lima and Pereira², who used *Bufo marinus*, and Wiltberger and Miller³, using *Rana pipiens*. It remains to be seen whether *Bufo bufo* or *Rana temporaria* will be equally suitable.

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¹ Galli Mainini, C., *J. Clin. Endocrinol.*, **7**, 653 (1947).

² Lima and Pereira, *Nature*, **161**, 676 (1948).

³ Wiltberger, P. B., and Miller, P. B., *Science*, **107**, 198 (1948).

Shortage of Scientific Text-Books

As one who is associated with a group of firms dealing with all aspects of the production, publishing and retail selling of learned, scientific and technical books, I have read with very considerable interest the article on the survey of the present shortage of scientific text-books in Cambridge carried out by the Cambridge Branch of the Association of Scientific Workers which appears in *Nature* of August 7, p. 209. Unfortunately some of the conclusions appear invalid.

That there is a shortage of text-books in this category there is no question. Under present conditions it is inevitable that in any discussion of this shortage mention must be made of the Board of Trade, so let me at once pay tribute to the officers of the Board of both the Import Licensing and Raw Materials Divisions, who have been approachable at all times, and, I am convinced, have done their utmost, often in circumstances of considerable difficulty, to ameliorate the position.

That too great a proportion of British scientific text-books has to be exported is a statement difficult to support. Export there is and must be; but there are few scientific books which are exported to an extent which harms the home market.

With regard to American books, the surveyors appear to be under one serious misapprehension. Despite what they say, it is possible for any individual requiring any American learned, scientific and technical book to go into a bookshop (preferably one with some experience of this type of work) and to order that book. If it is in print in the United States, there is no reason why it should not be in Great Britain within a month of the order being placed.

Secondly, with regard to the 200 per cent quota: this figure, taken in conjunction with the 'single copy' *modus operandi* referred to above, should be adequate to meet requirements at the present time. I agree that it is not so; but the reason lies not in the 200 per cent total figure but in the allocation of that figure on the basis of individual firms' imports during either the last half of 1939 or the first half of 1940. The reason is quite simple—in ten years the emphasis of business has altered as between firms, both book-