PHENOTHIAZINE FOR CATTLE LICE CONTROL

SUCCESSIVE trials using phenothiazine as a dust has proven this compound to be very effective against the short-nosed cattle louse, *Haematopinus eurysternus* (Nitzsch), and the long-nosed cattle louse *Linognathus vituli* (Linné). The insecticide, diluted with equal parts of white flour, was applied to twelve infested animals located in various parts of North Dakota. A 100 per cent. mortality of these sucking lice was obtained in every trial. It failed to kill, however, the chewing cattle louse, *Bovicola bovis* (Linné). Twelve hours after applying this mixture to two heavily infested bulls the chewing lice had discontinued feeding and were scattered throughout the hair; however, when the animals were examined the following day the lice had moved to the skin and were actively feeding. A mixture of sodium fluosilicate two parts, phenothiazine one part, and white flour one part, gave excellent control of both sucking and chewing types of lice. It is entirely possible that effective control may be achieved by increasing the diluent and decreasing the amount of phenothiazine or sodium fluosilicate. This phase of experimentation is now under way at the North Dakota Agricultural Experiment Station. In view of the limited supplies of rotenone and pyrethrin, both effective louse powders, this phenothiazine dusting mixture may replace these imported insecticides.

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EARLY AND LATE EASTER DATES

MARCH 24 is the most unusual Gregorian Easter date. Three years ago, in 1940, it occurred for the second time since the Gregorian calendar reform (1582). An interval of 451 years separates 1940 from 2391, the next year having March 24 as the Gregorian Easter date.

March 22 is the earliest possible Easter date. Although it occurred four times since the calendar reform, a record interval of 467 years will elapse between 1818 and 2285, the years of the latest and of the next return of March 22 as the Gregorian Easter date.

April 25 is the latest possible Easter date. Between the time of the Gregorian reform and the end of the nineteenth century, all the possible Easter dates—except March 24 and April 25—had occurred at least four times. In 1943, Easter Sunday will fall, for the fourth time, on April 25 in the Gregorian calendar. If one of the current calendar reform projects—all of which object to late Easter dates—should be adopted within the lifetime of the next two or three generations, April 25, 1943, may mark the last occurrence of this latest possible Easter date.

GREGORIAN EASTER DATES[1]

March 22	March 23	March 24	April 24	April 25
1598				
1693	1636		1639	1666
	1704		1707	1734
1761	1788	1799	1791	
1818	1845		1859	
	1856			1886
	1913	1940		1943
	2008		2011	2038
			2095	
	2160		2163	2190
2285	2228		2231	2258
2353	2380	2391	2383	2326

ALEXANDER POGO

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SPECIAL CORRESPONDENCE

THE WORK OF SOVIET BOTANISTS[1]

THE war, demanding a tremendous concentration of the forces of the whole people of the U.S.S.R., has also put forward a number of problems to be solved by the botanists. First and foremost, the huge expenditure of bandaging materials made it necessary for us to search for other than the raw materials ordinarily used for this purpose. In Russia and in a number of other countries during the World War of 1914–1918, sphagnum (peat bog moss) was used for this purpose.

At the very beginning of this war, work on the study and preparation of sphagnum was begun by the Institute of Botany of the Academy of Sciences of the U.S.S.R. situated in Leningrad. Large quantities of sphagnum were easily available in numerous peat bogs in the Leningrad district. Sphagnum, thanks to the peculiar structure of its cells, has excellent absorbent qualities. The moss is carefully cleaned of all extraneous matter, dried, steam sterilized and made into gauze-covered pads of various sizes.

Experience has shown that wounds heal much more

[1] Radioed to the American Association of Scientific Workers by Sergei Pilipchuk, secretary of the Soviet Scientists Antifascist Committee and forwarded to SCIENCE by Dr. Harry Grundfest, of the Rockefeller Institute.

[1] In the table published in SCIENCE, 91: 292, 1940, two dates have been inadvertently omitted.