

RAINFALL AT HAIFA, PALESTINE, NOVEMBER, 1921, TO MARCH, 1922.

Mr. Perez W. Etkes, assistant district engineer, has submitted the following data on the rainfall measured at Haifa, Palestine, during the six months November, 1921, to March, 1922, inclusive. The observations were made by Mr. A. Grossman, observer. The values originally submitted were in millimeters and these have been converted into inches.

TABLE 1.—Daily rainfall (inches) at Haifa, Palestine.

Day of month.	1921		1922		
	November.	December.	January.	February.	March.
1		1.31			
2			0.39		
3		0.24	0.12	0.16	0.59
4			0.04	0.04	
5					
6					0.13
7					0.40
8		1.40	0.07		
9		7.20	0.55	0.17	
10		6.35	1.06	0.11	
11		0.42	0.51	0.22	
12		0.30		0.04	
13					
14					
15		0.58			
16		0.95			
17		0.91		0.16	
18		0.27		0.25	
19	0.78	0.09			
20		0.21	0.82	0.18	
21			0.16		
22		0.21			
23			0.32		
24	1.89		0.16		
25	0.67		1.78		
26	0.06		0.07	0.26	
27	0.09	1.26		0.34	
28		0.28	0.58		
29		0.33	0.95		
30			0.25		
31					
Total	3.49	16.29	7.81	2.03	1.12

WEATHER AND DEATH RATE.

After discussing the relation between the birth rate and conditions in Germany as determined by Doctor Roesle, the Berlin correspondent of the *Journal of the American Medical Association* under date of July 29, 1922, says:

It could not be shown that economic conditions exerted a perceptible influence on the death rate. The year 1921 shows the lowest recorded death rate in German cities with more than 15,000 inhabitants, namely, 13.5 per thousand of population, and excluding deaths among strangers and transients the death rate was only 11.9. A comparison of the monthly death rates for former years brings out the fact that during the winter months of January, February, and March, 1921, exceptionally favorable weather conditions must have prevailed. The abnormally mild winter was followed by an abnormally hot summer, but the summer peak of infant mortality did not reach the terrible percentage of the summer of 1911. Also during the autumn of 1921 the weather conditions were favorable. These favorable weather conditions prevailed elsewhere as well, so that favorable death rates for the year 1921 are

to be expected also from other countries. Only for the month of December, 1921, was there a higher death rate than for the corresponding month of the previous year, which is explainable by the severe influenza epidemic. The rapid and continued decrease in the death rate since the war is due, for the most part, to the improvement in the food situation.

In the United States the decline in the death rate that has been in progress in recent years can not be due to improvement in the food situation but is accredited instead to improvement in medical treatment, higher medical standards, and, in large part, to health crusades and health education. These have to do with "fresh air," sunshine, proper eating, medical inspection, and the like. In the United States the decrease was about 10 per cent, or from 1,496 per 100,000 in 1910 to 1,306 per 100,000 in 1920, according to the census. But 1921 was an unusual year and so widely in this country was the low death rate ascribed to health propaganda that Dr. Raymond Pearl, of Johns Hopkins University, issued a word of warning, pointing out that the very low rate of that year was probably due to other factors. The meteorologist knows that 1921, as well as the year of the great influenza epidemic, was quite unusual from a weather standpoint. Further evidence of the weather factor is presented in figures just released by the Bureau of Census which show an increase in the death rate for the first quarter of 1922 of 10 per cent, or from 12.6 to 13.7, the greatest rate being 17.6, in the District of Columbia, and the least rate 9.6, in Wyoming.

Again, it is interesting to note in connection with the unusual weather conditions that the death rate for the year 1921 was not only the lowest on record but was also quite the same in value for countries and cities widely separated. Doctor Copeland claimed New York City to be the healthiest city in the world with a death rate of 11.2, while the death rate for New York State was 12.2. But the rate for 148 towns in England with populations from 20,000 to 50,000 at the 1911 census was only 11.3, London 12.4, 96 of the larger towns 12.3, and England and Wales 12.1 approximately. In 1918 the death rate in England and Wales was 17.6.

It would be interesting and valuable to be able to trace out the definite connection between specific diseases and the weather. Thus in 1921 where dry weather was persistent, as in England, there were severe epidemics of scarlet fever, and medical authorities had previously noted a connection between scarlet fever and dry years. A correlation study of the Binghamton, N. Y., records and those for Pennsylvania leads me to believe that it is low relative humidity that is the important factor, coupled, of course, with a suitable field for endemic prevalence of the bacterium. There is opportunity for much work along these lines.

It would be interesting, too, and perhaps very valuable, to have statistical data in regard to plant and animal disease and make similar studies.—*John R. Weeks.*