

# SPECIAL COMMITTEE REPORT.

TABLE SHOWING THE SUN'S RELATIVE INTENSITY, AND THE LENGTH OF THE DAY IN LATITUDES 40° N., 50° N. AND 60° N.

	Latitude 40° N.		Latitude 50° N.		Latitude 60° N.	
	Sun's Intensity	Length of Day	Sun's Intensity	Length of Day	Sun's Intensity	Length of Day
May 1 .....	80	13.46	77	14.30	70	15.44
" 16 .....	85	14.16	83	15.16	79	16.56
" 31 .....	88	14.38	87	15.50	85	17.56
June 15 .....	90	14.50	89	16.08	88	18.28
July 1 .....	90	14.46	89	16.04	88	18.18
" 16 .....	87	14.34	86	15.42	84	17.42
" 31 .....	84	14.08	81	15.04	71	16.38
Aug. 15 .....	79	13.36	74	14.18	68	15.24
" 30 .....	72	13.02	65	13.28	57	14.08
Sept. 14 .....	65	12.22	58	12.32	46	12.46
" 29 .....	57	11.44	47	11.36	36	11.26

"The conditions required for the adaptation of a certain area to agricultural purposes, apart from altitude above the sea and the character of the soil, are generally reduced to two, namely, the mean temperature of about 90 days, as during the summer or growing months, and the degree of humidity during that period.

"There are, however, two other conditions which exercise a very great influence upon vegetable growth throughout an area extending over many hundred miles to the north. These are the measure of the sun's intensity as regards light and heat, and the duration of the length of the day. As we move from Manitoba, say in lat. 50° to Peace River in lat. 56° (or York in 57°), this important fact has to be noticed that the length of the day in summer increases in a greater ratio than the sun's intensity of light and heat diminishes. It is not heat only that affects the growth of vegetation, it is also the duration of solar light in the day. The longer the day the greater the total amount of heat and light which will be received by vegetables."

"Look at the table and you will see that in lat. 40° the sun's intensity is 88, on May 31st, the day being 14 hours 38 minutes long. In lat. 50° the sun's relative intensity of light and heat on the same day, is 87, but the day is 15 hours and 50 minutes long. In lat. 60°, the sun's intensity on the 31st May, is represented by 85, but the day is 17 hours 26 minutes long. The day