

MACDONALD COLLEGE

PHYSICS DEPARTMENT

RAILWAY STATIONS, EXPRESS AND TELEGRAPH OFFICES:
STE. ANNE DE BELLEVUE, QUE.

POST OFFICE:
MACDONALD COLLEGE, QUE., CANADA.

January 17th, 1930;

The Principal,
McGill University,
Montreal, Que.

Dear Sir Arthur:-

The Ministry of Agriculture of Great Britain has just published a lengthy report on an Empire Conference held in London last August, in which the value of exact Meteorological data to Agricultural Research is greatly emphasised.

For some years now I have made attempts to organise a small meteorological station at Macdonald College but there has been no money available. I also wrote to the Director of Meteorological Service of the Dominion to inquire whether his department would be interested in the establishing of a station here but received a very vague reply.

The thought has just occurred to me that an inquiry from you would elicit a more definite response.

The scheme as worked out in Great Britain is that the Ministry supplies the complete equipment of apparatus on loan to the Colleges, the College being responsible for their maintenance, and the observations are forwarded to the Ministry at regular intervals for incorporation in their reports.

Such meteorological observations, to be of any use, must be exact and must extend over a considerable interval of time. Even if no immediate correlation can be established between crops and weather at the present stage of Agricultural Scientific development, yet it is quite certain that in a few years time such correlations will be established and exact records will prove very valuable.

The important factors I think will be

- (1) Temperature of soil (a) at surface
(b) at depth of 8 inches
(c) at depth of 12 inches.
- (2) Hours of sunshine
- (3) Intensity of sunshine
- (4) Direction and Velocity of Wind
- (5) Relative Humidity of Air
- (6) Precipitation

To my mind one of the most important factors in Agriculture is (1), as not only is the seed affected by the temperature