

THE  
Canadian Agriculturist.

VOL. VIII.

TORONTO, JUNE, 1856.

No. 6.

HORTICULTURAL AND AGRICULTURAL CENTRAL CLUB.  
SUBJECT—MANURES.

The third regular meeting for discussion of this Club took place on 1st April, Col. Thomson, Vice President, in the chair.

Professor H. Y. Hind, M. A., Trinity College, read the following paper "On the preservation of Farm Yard Manures, with some remarks on the sudden appearance of Rust, Blight, and Mildew, and suggestions as to a remedy."

The variety of new or modified views respecting the relative importance of different kinds of plant food which are periodically presented to the public under the shadow of great and trustworthy names, is a proof that the question is still involved in much obscurity and well deserves the most careful attention and study.

It cannot now be doubted that it would be very unwise to pen our faith exclusively upon the application of any artificial organic manure, it would be equally injudicious to lay too much stress upon the constant but *bare* renewal of the mineral elements of the soil renewed by cropping; and we should not the less fall into error if we were to abjure all kinds of manures and rely altogether upon the exalted physical and chemical properties of the soil, induced by deep spade husbandry and drainage. We must avoid all extremes, and in deciding upon the kind of plant food to be administered, or the mode of administration, we must be guided, firstly, by the sources from which plants derive their food; secondly, by economical considerations, the physical condition of the soil, and the peculiarities of climate.

In this paper I propose to limit myself to a discussion of the sources, preservation and distribution of one kind of plant food which is universally acknowledged to be necessary, and to lie within our immediate reach. Indeed, the majority of scientific and practical farmers believe it to be the most important element of stable and organic manures, (guano, &c., &c.) and a few, regard it as the main spring of vegetable growth and luxuriance.

Nitrogen, in the free state or in the form of ammonia and nitric acid, has, probably, excited more discussion and led to a larger number of experiments in relation to vegetables than any other element or compound which assists in building up their structure. Its importance cannot be over-estimated, the simple fact that no flesh forming principles and no seeds can be formed by vegetables in the absence of nitrogen is sufficient testimony to the nature of this most inert and tractable element.