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Farm Yard Manure.

ew subjects deserve greater consideration at the hands of Canadian farmers than the advanced management and application of farm manure. Many thousands of pounds are annually lost from ignorance or neglect of these important matters. Professor Voelker, the able chemist of the Royal Agricultural Society of England, a short time since went into laborious investigations respecting the position of this kind of manure, and the losses and deterioration to which it is ordinarily subjected. His experiments were made on considerable quantities, treated in different ways, for the purpose of observing the changes it undergoes; and great care appears to have been exercised in all the operations, particularly in selecting samples for analysis. In these investigations it would appear that a great loss to which farm yard manure is subjected is not so much from evaporation of ammonia into the air, as has hitherto been commonly supposed, but chiefly from the action of washing out the soluble matter. The loss of ammonia by exposure, unless the mass is subjected to a considerable degree of fermentation, appears to be in reality very small. The following table, giving the composition in pounds of an experimental heap of manure at four dif-

ferent periods, will afford the reader some idea of the changes which occur:—

	Put up Nov. 3d, 1854.	April 30, 1855.	August 23rd.	Novem- ber 15.
Weight of manure in lbs.....	2835.	2026.	1,394.	1974.
Water.....	1877.9	1336.1	1505.3	1466.5
Dry Matte.....	960.1	689.9	488.7	507.5
Soluble organic matter.....	70.38	86.51	58.83	54.04
Soluble inorganic mat- ter.....	43.71	57.88	39.16	36.89
Insoluble organic mat- ter.....	731.07	389.74	243.22	214.92
Insoluble inorganic matter.....	114.94	155.77	147.49	201.65
Total nitrogen.....	960.1	689.9	488.7	507.5
Equal to ammonia.....	18.23	18.14	13.14	13.03
	22.14	22.04	15.96	15.75

It is to be observed that, during the first six months, although the weight of the manure largely diminished, the loss was almost exclusively confined to the insoluble organic matter; while the soluble matter had increased, and the ammonia remained undiminished. But during the hot summer weather all the most valuable matters had undergone diminution.

Many important and elaborate analyses made by Dr. Voelker, show the composition of the dung when treated under different systems. The conclusions to which they lead are these:—Farm yard manure in its fresh state contains but a small quantity of ammonia, most of its nitrogen being there as insoluble nitrogenous matter. But as the decomposition advances the ammonia increases, and a quantity of organic matters become soluble. For this reason the manure