

As required by the Fertilizers Act, the tabulated statement contains also a column in which the relative value per 2,000 lbs. of each fertilizer is given, calculated from their contents in fertilizing ingredients, the values of these being taken as follows:—

	Cents per lb.
Nitrogen in salts of ammonia or in nitrates, as well as in compound fertilizers .....	17
Organic nitrogen in ground bone, fish, blood or tankage .....	16

*Phosphoric Acid—*

Soluble in water. ....	6
Soluble in 1 per cent citric acid solution.....	5½
Insoluble in Thomas' phosphate powder.....	3½
Insoluble in ground rock, phosphate and fertilizers generally.....	1½
Potash in high grade salts.. ..	5

These rates are the same as those of last year, which were then modified in order to bring them to correspond more closely with the present market prices of the materials used in the manufacture of fertilizers. The valuation of each brand is calculated on the results of the analysis of the standard samples, but it has been omitted in the case of the guaranteed contents on account of the imperfect character of the information supplied in the majority of instances.

In studying the present tabulated statement there seem to be good grounds for believing that the number of fertilizers of low price is on the increase, and it would appear necessary to call the attention of the farmer to the consideration that the fertilizing constituents in these are likely to cost him more than in fertilizers of a higher grade. It costs as much to mix a ton of fertilizer containing say 300 lbs. of plant food as it does one containing twice that quantity. The cost of packing, cartage and freight is the same per ton. It is evident, therefore, that the manufacturer is in a position to sell the fertilizing constituents of a high grade fertilizer at cheaper rates per pound than those in brands of low grade. In other words, the higher the grade the cheaper can the plant food be bought. Farmers should therefore consider the advantages of purchasing only high grade fertilizers. He should be also advised to avoid those brands which have less than 2 per cent of ammonia or potash. These percentages are too low in cases where such ingredients are required, and where they are not needed it is useless to purchase them. It is a waste of money to buy nitrogen or potash in fertilizers containing less than 2 per cent of these ingredients.

I beg to request the immediate publication of this report, in order that the analyses of the standard samples may be readily compared with those of the 'fertilizers as sold' which are now being collected.

I have the honor to be, sir,

Your obedient servant,

THOMAS MACFARLANE,  
*Chief Analyst.*