

KUHLMAN'S EXPERIMENTS ON AMMONIACAL MANURES.

In explanation and in continuation of Kuhlman's experiments, we subjoin the following table, showing the value of various substances, in ammonia. Not that this is the sole criterion of value in a manure, but as these experiments have shown the value of ammonia, the table is interesting as showing the quantity of the various substances which are required to replace 100 parts of farm-yard manure by supplying as much ammonia as it will.—(The table is extracted from a much larger one by Payen and Boussingault, in "*Comptes rendus à l'Académie des Sciences.*")

Substances.	Proper weight of the substances which contain as much ammonia as 100 parts of farm-yard manure.	Substances.	Proper weight of the substances which contain as much ammonia as 100 parts of farm-yard manure.
Farm yard manure,.....	100.0	Man,.....	78.1
Poa straw,.....	22.3	Dry flesh,.....	3.06
Wheat straw,.....	166.06	Blood,.....	13.3
Rye straw,.....	235.2	Feathers,.....	2.6
Oat straw,.....	142.85	Horn parings,.....	2.78
Barley straw,.....	173.9	Fresh bones,.....	7.54
Fresh beetroot leaves,.....	90.0	Charcoal from the refineries,.....	37.7
Potato stalk,.....	72.72	Animalized carbon,.....	36.69
Root of clover,.....	24.8	Excrements of sheep,.....	36.0
Linseed cake,.....	7.69	Excrements of pig,.....	63.0
Liquid farm-yard manure,.....	67.7	Peruvian guano,.....	7.88
Excrements of cow,.....	125.0	Ichaboe guano,.....	10.14
Urine of cow,.....	90.9	Richardson's prepared bone manure,.....	11.23
Excrements of horse,.....	72.7		
Urine of horse,.....	15.3		

THE STORING OF TURNIPS.—A correspondent residing in Northumberland states that "his turnips are all too large, and ought to have been stored this week, for the last swelling of a turnip is that which makes the heart soft and hollow, where the first symptoms of decay always begin. Now if the turnip is stored before the last swell, that which would go to size turns to sugar, keeps the centre of the fruit sound and hard, and makes it keep three months longer than those which are allowed to attain the extreme size and growth. He finds by so doing his turnips keep better and longer, and enables him to get in his wheat seed at a more desirable season."—Morpeth, Oct. 16.

DISCOVERY OF A NEW CEREAL.—"The common fat hen (*Atriplex*) forms when young, as we gratefully experienced, an excellent vegetable, as do also the young shoots of the sow thistle (*Sonchus*). In the vicinity of the Palm Tree Creek, I noticed a grass with an ear much resembling the bearded wheat. With the exception of the cultivated cerealia it had the largest seed I ever met with in grasses; even my black fellow was astonished at its remarkable size."—*Leichhardt's Overland Expedition from Moreton Bay to Port Essington, Australia.*

POTATO DISEASE.—A circumstance came under our notice the other day relative to potatoes, which may not be unworthy of giving to our agricultural friends. A respectable citizen in the High-street, from seeing a paragraph in some newspaper recommending almost any quantity of gas-lime for the preservation of the potato, make up his mind, out of curiosity, to make a trial of the plan. In February last he accordingly obtained as much gas-lime as made his neighbours wonder, and they at once declared his potatoes would be burnt up. He, however, persevered, and "clogging" his ground with the lime; they continued to laugh at him, nevertheless he had triumph over them all. All of their potatoes were more or less diseased, while not one of his up to the present time has indicated the slightest taint. In fact they have exhibited the finest perfection of the esculent that has been probably found this year. They consist of three kinds—American earlies, buff's (seed from Yorkshire), and Scotch reds. All were prime; and so much has the individual taken hold of the idea of, "gas-lime," that he has engaged with a neighbouring farmer (running chances mutually,) to plant several acres upon the same principle.—*Perthshire Courier.*

POTATO DISEASE.—It is now beyond any doubt that the potato-rot is extending rapidly in all the districts of Perthshire; even in the Highlands, where little or no symptoms of disease appeared in the fields, it is fully worse than it is in the lower districts. It is perhaps worthy of notice that the largest tubers are first affected, and in them it presents itself in its most aggravated form. It is somewhat singular, too, that the produce of foreign seed has uniformly escaped the malady.—*Weekly Register*

THE POTATO DISEASE.—The fears which many entertained at an earlier period of the season, concerning the ultimate spread of disease among the potatoes, are being unfortunately confirmed in this part of the country. We last week had an opportunity of personally examining many samples in the surrounding districts, and can affirm that in no instance which came under our notice is there a prospect of looking forward to this useful esculent, as a means of subsistence, beyond Christmas.—*Staffordshire Mercury.*

CARROTS prove an abundant crop in the neighbourhood of Garstang, and which will well repay the farmers, as the cost of the seed is only about one penny per load of 240lbs. of fine large clean roots, some weighing 5lbs each, without their tops. Carrots are far superior to turnips for making cows produce more milk and butter, and which is also of a far superior flavour.

At a late meeting of the Cleveland Agricultural Society, at Guisborough, Yorkshire, the Earl of Zetland stated that on his Scotch estates he had not one tenant with an acre undrained.