

Proportion of Ash :

	Grain.	Husk.	Straw.
Field Beans	2.1 to 4.0		3.1 to 7.0
Field Peas	2.5 to 3.0	Pod. 7.1	1.4.3 to 6.2

Composition of ash :

	Bean Ash. Mean of 3 analysis.	Pea Ash. Mean of 4 analysis.
Potash	33.56	36.05
Soda	10.60	7.42
Lime	5.77	5.29
Magnesia	7.99	8.46
Oxide of Iron	0.56	0.99
Phosphoric acid	37.57	33.29
Sulphuric acid	1.00	4.36
Chlorine	0.73	
Silica	1.15	0.51
Chloride of sodium (common salt.)		3.13
	<hr/> 98.83	<hr/> 99.50

It will be observed that these leguminous grains contain a large proportion of the protein compounds, and are therefore eminently useful in supplying the waste of muscular matter.

Indian Corn.—This grain is nourishing to every kind of stock. It is raised on this continent in large quantity for human food, as well as for stock. It is especially well adapted for the feeding of poultry.

The nutritive matter afforded by an acre of this grain, producing 30 bushels, or 1800lbs, is as follows : Husk and woody fibre, 100lbs. ; of starch, sugar, &c., 1250lbs. ; of gluten, &c., 216lbs. ; of oil or fat, from 95lbs. to 107lbs. ; and of saline matter, 47lbs. The most remarkable result is the large quantity of fat contained in this grain.

When dried, the composition, according to Payen, is as follows :

Husk	5.9
Gluten, &c.	12.3
Starch	71.2
Sugar and Gum	0.4
Fatty matter	9.0
Saline matter or ash	1.2

100.00

Composition of the Ash of the United States by Fromberg, and from Germany, by Letellier—mean of two analyses :

Potash	} 32.48
Soda	
Lime	1.44
Magnesia	16.22
Oxide of Iron	0.30
Phosphoric acid	44.87
Sulphuric acid	2.77
Chlorine	0.18
Silica	1.44

99.70