

sample of a cargo from Patagonia, brought into Norfolk in the summer of 1858:

Water and organic matter,	31.34
Silicates insoluble in hydrochloric acid,	34.45
(containing of ammonia—1.31.)	
Lime,	5.56
Magnesia,	trace
Alumina,	13.66
Oxide of iron,	3.71
Phosphoric acid,	5.51
Sulphuric acid,	4.21
Alkaline salts,	0.41
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	99.85

The combination of the basis and acids is as follows:

Sulphate of lime,	7.98
Phosphate of lime,	4.85
“ “ alumina,	6.38

Of the insoluble silicates above mentioned, only 10.68 escaped solution in caustic potash, so that a large amount of the silica present is soluble in that reagent.

Another guano somewhat resembling this, but of greater value, was brought here from Soldanha bay, Africa, in 1854. I analyzed a sample of it with the following results:

Water,	17.06
Organic matter,	7.89
Sand,	39.59
Lime,	9.56
Phosphoric acid,	17.54
Iron, alumina, magnesia, &c., (not estimated,)	8.46
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	100.00

The phosphoric acid is equivalent to bone phosphate of lime, 38.10

In another guano of this soft variety, sulphate of lime is present in large quantity, but the phosphate of that earth is more abundant than in the Patagonian above described. Of this variety, the following analysis of a sample from *Portland bay*, Cape Colony, Africa, will furnish a good example:

Water,	21.37
Organic matter,	10.44
Phosphate of lime,	40.24
Sulphate of lime,	9.88
Sand,	0.61
Iron, alumina, alkalis, &c., (not estimated,)	17.46