

from fifty to seventy-five pounds per acre. On the light variety of these soils lime would be only needed according to the directions which I have before given. The mode of cultivation of these soils should be different as they are stiff or light—when stiff, green crops and coarse manure should be ploughed under in the autumn—when light, they should be top dressed, with coarse manures, and the grass crop suffered to remain on the surface until spring.

The following are analyses of some specimens of these soils :

Specimen from P. G. county, opposite Alexandria—specimen hard, heavy, and compact—surface soil. Dr. J. H. B.

Organic matter,	-	-	-	3.21
Silica, (sand, coarse,)	-	-	-	34.30
Silica, (sand, fine,)	-	-	-	58.92
Iron as peroxide and alumina,	-	-	-	3.90
Lime as carbonate,	-	-	-	.30
Magnesia,	-	-	-	.03
Potash,	-	-	-	.02
Soda,	-	-	-	.14
Chlorine,	-	-	-	.07
Sulphuric acid, a trace,	-	-	-	.01

The sub-soil from this specimen differed from that on the surface in containing 7.94 per cent. of iron and alumina, nearly double of the surface soil—should at any time, then, this soil require tenacity, or be “backward in crops,” both can be remedied by turning up a small portion of the subsoil. The iron and clay will impart the tenacity, and at the same time, by its color and other properties, absorb a larger quantity of heat and of ammonia from the atmosphere.

Specimen from near Horse Head, in P. G. county.

Organic matter,	-	-	-	2.81
Silica, (sand,)	-	-	-	93.00
Iron and alumina,	-	-	-	3.60
Lime as carbonate,	-	-	-	.16
Magnesia,	-	-	-	.17
Potash,	-	-	-	.03
Soda,	-	-	-	.09
Chlorine,	-	-	-	.05
Phosphoric and sulphuric acid (traces,)	-	-	-	.01

Specimen from Bower's Old Fields, near Woodville, P. G. county.

Organic matter,	-	-	-	2.81
Silica, fine,	-	-	-	50.00
Silica, coarse,	-	-	-	42.80