

Experiment without true theory will do something, will be of benefit to him and to him alone who makes it; but when a false theory is propagated and men act upon it, they must suffer loss, they have not experiment, uncertain as it is, to guide them; they are led into false action by following rules given upon false notions of the nature of things, which must ever produce uncertainty, dissatisfaction and loss—loss which is double, being both from the doing of that which is wrong, and the not doing of that which is right.

There is a proportion of phosphoric acid in these soils quite sufficient for present purposes if it was in an active state; this is not the case, and therefore bones would be a good application, in the manner and form I have recommended when speaking of them.

The best modes to bring those soils into profitable cultivation at once, would be to give the wheat crop a dressing of Peruvian guano with a small quantity of dissolved bones, say two and a half bushels per acre. This wheat crop should be followed by clover, which should be only partially grazed; this, then, should be flushed up in the fall and lime applied. I have no doubt that the increase of current crops would pay all the expenses of the manures with the cost of labor in applying them, and after the application of the lime, would produce very fine wheat crops for a long series of years. The increase of the money value of the land would be more than one hundred per cent. in five years.

This soil from the west commences near Poolesville in Montgomery, passes through the upper part of that county parallel to Parr's Ridge, and thence passes over the Patuxent river, forming nearly all of the soils of the upper parts of Montgomery and Howard counties. It sometimes varies in color and productiveness, the former owing to a larger quantity of peroxide of iron, the latter being due to the more thorough degradation of the soil. It is intersected with many fine streams of water, is convenient to market, and can be had at very cheap rates.

The following are some of the analyses made of this soil:

Specimen from near Poolesville in Montgomery county.

|                                      |       |
|--------------------------------------|-------|
| Organic matter,.....                 | 3.25  |
| Silica, (sand,).....                 | 87.60 |
| Iron and alumina,.....               | 8.40  |
| Iron and alumina as phosphates,..... | .06   |
| Lime as carb.....                    | .12   |
| Magnesia,.....                       | .11   |
| Potash and soda,.....                | .28   |
| Chlorine,.....                       | .04   |
| Sulphuric acid,.....                 | .02   |