

per acre and the other 13 bushels without fertilizer. The yield last year in excess of the natural land, as may be seen in Bulletin 7, under very heavy fertilization was too small to warrant the opinion that excessive and costly fertilization of corn would be profitable. Nor am I prepared from this year's experience to venture the opinion that the intensive system will become, or ought to be the rule of the farmer in regard to this crop. Seasons and climatic causes largely modify the yield, and these are so variable in our State as to prevent any definite average as to annual production. It has become a settled conviction among farmers that our climate is not adapted to the profitable production of corn as a marketable crop. While the yield has doubtless had much to do with this opinion, the true cause may most likely be attributed to the soil. The following analysis in Bulletin 2, of the station soil, five inches deep, taken from a part of the farm that has been cleared the longest, and which has been in cultivation over thirty years, gives an idea of its productive forces: Water, 0.51 per cent.; organic and volatile matter, 1.27; sand, 96.02; clay, 2.77; oxides of iron and aluminum, 0.33; lime, 0.06; magnesia, 0.03; phosphoric acid, 0.07; potash and soda, 0.09. This land was originally high hammock, bordering a large lake. This one in Bulletin 5 is taken from the virgin soil in low hammock, about one hundred yards from the lake, the same depth: Moisture at 100 degrees, 0.59 per cent.; organic and volatile matter, 2.50; lime, 0.03; magnesia, 0.02; phosphoric acid, 0.02; potash and soda, 0.10; iron and aluminum oxides, 0.13; clay, 0.50; sand, 96.00. These two samples give some idea of the available land upon the station.

Now, if these are compared with the analysis of land planted in corn adjacent to Missouri Experimental Station, on which a most elaborate and scientific experiment last year was made, it will be seen that the Missouri soil is far better adapted to the growth of corn than that used by me. It is as follows: Analysis, 1, a.: Water at 100 degrees, 1.82 per cent.; nitrogen, total, 0.14; carbon, total, 1.63; loss by ignition, 6.97; silica, 77.82; aluminum, 8.93; oxide of iron, 3.05; lime, 0.63; magnesia, 0.64; potash, 1.32; soda, 1.59; phosphoric acid, 0.08. The increase does not warrant the use of fertilizers on this soil. In Florida the question as to whether it is profitable to plant corn has been settled by the universal practice of our farmers who plant the standard crops in trying to make enough for home demands. It would be a sad day, indeed, if they were to reach the conclusion that it would be better to buy their grain instead of raising it, until the products of our State in the farming sections change, as they have done so largely in East and South Florida. And it is becoming a very important question with some, in the Eastern and Southern portions of our State where vegetables and fruits are the leading products, if the planting of corn, at least to a limited extent, would not be better than to neglect it altogether, when the prices paid for Western corn ranges from 60 cents to \$1.00 per bushel, and forage from \$20.00 and upwards per ton, to say nothing of the labor and time in hauling it.