

No. 5. 3-8-3 combination, 800 lbs. per acre.

No. 6. Check plot.

Plots 4, 5 and 6 contained the ripest tobacco and at the same time the yellowest leaf on the hill. This was conclusive evidence (that was borne out in previous years) that this soil did not require a fertilizer containing a large percentage of nitrogen to get the best coloured leaf in bright tobacco. To confirm this statement, it was noted that plots 2 and 3 were quite growthy and had a greenish cast for 10 days after the other plots were harvested. The tobacco on these latter mentioned plots was also larger in the leaf. A conclusory statement is that this soil required potash and phosphoric acid to get the best quality of leaf.

Soil treatment. The soil for the above tests was a uniform textured sandy loam. The previous cropping in 1909 was wheat, in 1910 Burley tobacco manured in winter and early spring. Rye was sown in the fall of 1910 before the tenure of the land was agreed upon. This crop was ploughed under in 1911 just as it was heading out. Owing to the summer of 1911 being very dry, the rye was not thoroughly decomposed. At all events the sowing of rye for a cover crop, with the idea of adding fertility to the soil, is a false one. It is preferable to plough under a leguminous crop like peas, red clover or hairy vetch. If rye is to be turned under, do not wait till it is heading out or has headed out, since the tough, wiry straw, of this cereal will not decompose readily and will form a dividing layer in the bottom of the furrow between the upper surface soil and subsoil, shutting off capillary action of the soil water. This experience on a sandy soil was met with last summer. Had the crop been pastured or ploughed under when say 8 inches high, the results might have been better.

The Returns from Bright Tobacco and its Comparative Value with Burley.

During the past three seasons, the average price secured for this tobacco has been 25 cents per pound or an average gross return of \$250 per acre.

Some of the difficulties connected with its culture are: the variability of the colour; the extra labour incurred in the suckering and grading; the expenditure for wood for curing, and the skill required to handle the curing process. On the other hand some of the advantages of this type are: No manure expenditure necessary; a very small expense for commercial fertilizers; an impoverished light sand will produce this leaf whereas Burley would be a failure; and the very limited time required for curing, thus giving the use of the barns for other purposes if required.

Counterbalancing all the merits and demerits of the two crops the writer would say that the white Burley is preferable for the average farmer to grow. But the writer would suggest this, that for the tobacco grower who has a piece of light sandy soil, that will not produce Burley successfully, and who is anxious to learn the little differences in the handling of this crop, his land might be made to produce a paying return in bright tobacco.

Our Present Outlook.

While perfection in its culture has not been reached, still it is believed that by growing the Warne on the same soil for two to three seasons in succession, and by