

field, which is not so fertile, as a rule. Contrary to the general belief, a crop of tobacco does not take as much plant food from the soil as a crop of corn which the same soil is capable of producing. Soil which will produce 1,500 pounds of tobacco per acre should produce 75 bushels of corn per acre. The tobacco contains approximately 48 pounds nitrogen, 12 pounds phosphoric acid and 66 pounds potash, while the corn, including the stover, contains approximately 111 pounds nitrogen, 40 pounds phosphoric acid and 64 pounds potash. It is therefore evident that tobacco land is in much better physical condition and contains more moisture and available plant food than the corn land. It is moisture and available plant food that the wheat crop needs to start it off in the fall. Moreover, it is impossible to put the soil of the corn field in good condition for wheat on account of the interference of the stalks, and besides there is a great waste of space in the ground occupied by the corn shocks in case the corn is cut. Again, there is more or less injury to the wheat by the gathering of the corn and stover. The tobacco land is easily put in ideal condition for wheat.

To obtain the best results, it is our belief that wheat should not follow corn in any rotation, for the reasons enumerated above. The Experiment Station has adopted a rotation of corn followed by rye for a winter cover crop, which is turned under in the spring when the ground is prepared for soy beans (or cowpeas) for the second year crop. Soy beans are followed by wheat for the third year, and wheat by clover for the fourth year. This rotation gives a clover sod for corn, and allows a green crop of rye to be turned under. The rye prevents the loss of available plant food left in the corn field and prevents washing during the winter. The soy beans leave the ground in as fine condition for wheat as tobacco, and being a legume, do not draw so heavily upon the soil nitrogen as tobacco. Thus in this rotation there is the advantage of one rye cover crop and two legume crops in four years. In a corn, wheat and clover rotation there is no cover crop to be turned under, and only one legume crop. The experience on the Experiment Station