

salt. They think when they salt cattle and sheep that salt kills the grass, but this is not so. The cattle kill it by eating the ground where the salt was put down. I will admit that salt will kill plants, *and would like to find some one* who would pay for enough for me to try the experiment. I hold that land needs salt as much as cattle do. The first time I tried it was on a twenty acre lot sowed with spring wheat. In two weeks I could see the difference between what I had sowed with salt and that which had received no salt, and I could also see the difference when harvested. The part sowed with salt had no chinch bugs, while on the other, which had no salt, I could gather a quart to every sheaf the reaper threw off. I have never seen any damage done by chinch bugs where there had been 200 pounds of salt sowed broadcast on the crop. The time for sowing is when the grain is about four inches high. I have sowed salt when the grain was coming out in head, and with good results, but would prefer to sow it earlier."

Mr. T. D. Burdette, Gatewood, Fayette County, W. Va., writes :

"I have thought that salt could be used on some soils profitably, and tried it once on a small piece of craw-fish land and must say that they were not so bad to stack up the earth as they had been on that land and I don't know that they have ever been since."

*Salt as a Germicide* Stands first in the rank. A few years ago, says "Storer's Agriculture," one of the most successful planters of the South made the following statement:

"I have used salt for fifteen or more years. I find it essential to success on all lands like mine. 300 pounds of salt and 200 pounds of plaster are almost a total preventive of rust, which is one of the worst enemies the planter has to contend with. Salt makes cotton bear longer in the season, and stand drought better; it increases the quantity and improves the quality. It acts equally well on corn,

oats and other grains, and it toughens wheat straw so that there is less waste from ears breaking off when the crop is cut."

*Some Chemists Claim* That salt is no benefit as a manure and from theoretical grounds deny its value when used as such.

*Practical farmers* who do not fear "science" have pointed to the increased crops, and asked, "How is that?"

Now let us see what explanation can be made of the use of salt in agriculture beyond the small amount required for the ash element. Prof. May, an eminent authority, has shown conclusively that salt in solution renders soluble *ammonia* which had become insoluble in the soil.

Prof. Atwater in a recent report says :

"Something has been said about the use of ordinary salt as a fertilizer. One important office of the salt is to make soluble, and consequently useful in the plant, the materials already locked up, as it were, in the soil. Supposing you have been putting on barn yard manure and other fertilizers. Some of the nutritive materials, as, for instance, potash and phosphoric acid, may perhaps have been taken up by the soil, and remain there in a difficult soluble condition. Furthermore, there are in the soil some of these ingredients that were in the original rock of which the soil is made up, and are still, so to say, locked up, or in other words, still remain in an insoluble form therein. One effect of salt, as is the case oftentimes with plaster and lime, is to set loose that potash or phosphoric acid. You must expect, therefore, in putting on salt, that its chief use will be, not as a direct nutriment to the plant, but rather as a means of setting other materials loose; and salt is very useful on this account, because it is not readily observed in the upper layers of the soil, but often reaches through into the layers; and it will have the effect of setting these materials free all the way down."