

while the above compost improves the lands. Some advantage is perceptible the second year with rotted bone and gossypium, but not to that extent where the compost is used.

The compost used on peach and pear trees is a most excellent fertilizer, and the addition of one pound of sulphate of iron, which is copperas, is manifest.

Thus far cottonseed meal and the compost give the best results for a greater variety of crops over others used.

ANALYSIS OF SOME FLORIDA WEEDS AND GRASSES.

- I. The Value to be Attached to Chemical Analysis of Feeding Stuffs.
- II. Meaning of the Terms Used in the Analysis of Feeding Stuffs.
- III. Some Florida Weeds and Grasses as Feeding Stuffs.

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In Table I (end of Bulletin) are given the analysis of a few grasses and weeds common in Florida.

I. THE VALUE TO BE ATTACHED TO CHEMICAL ANALYSIS OF FEEDING STUFFS.

The animal organism, notwithstanding its great complexity, is composed of comparatively few substances. These few substances can be reduced to still fewer classes. All animal matter is either combustible or incombustible (ash). The combustible part is either *nitrogenous* (containing nitrogen) or *non-nitrogenous* (not containing nitrogen). The non nitrogenous part consists of fat, oil, tallow, etc. The muscles, tendons, nerves, etc., are made up of nitrogenous substances. These various substances find their way into the animal organism through the food. This is equivalent to saying through plants. All animals live either directly or indirectly on vegetable matter. Hence, we would expect to find close resemblance in the composition of animal and vegetable substances. This resemblance (almost identity) exists. The ash of plants contains every substance found in the ash of animals. The combustible part of plants contains either identically the same compounds found in the combustible part of animals, or else the compounds from which the latter are built up. Chemical analysis alone cannot tell whether a plant is fit for food, but, if fit for food, it can tell how much of the various crude food constituents it contains. What gives value to a