

As a formula for mixing the above materials, for an acre of apples or other fruits, we would then have

50 to 100 pounds nitrate of soda.
100 to 200 pounds muriate of potash.
200 to 400 pounds ground bone.

If 50 to 100 bushels of unleached wood ashes could be obtained, they would more than take the place of the potash, and would supply perhaps one-half of the phosphoric acid required.

Before using any chemical fertilizers to any extent, it is well to test the effect of each of the above materials on separate plats, in order to learn if they have any effect. Oftentimes one or more of them will be found to be present in sufficiently large quantities, and if more was applied it would only be wasted.

The soluble chemicals should only be applied in the spring, or, better yet, after growth has commenced; they should generally be scattered broadcast, and harrowed or dragged, rather than plowed in. Precautions should be taken, not to bring these chemical fertilizers in contact with the roots of trees, as the results might be disastrous.

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HOGS IN THE ORCHARD.—Sheep leave their manure merely as a top-dressing for the orchard; hogs work theirs into the soil. Sheep harden the ground; hogs disturb the turf and leave it uneven, but you get finer fruit in consequence. Sheep eat all the tender twigs and leaves they can get hold of; hogs seldom touch the limbs. Hogs sometimes disturb the roots, but this is oftener beneficial than otherwise. An orchard set 50 years ago was not bearing fruit of any value. Two acres of it were fenced and some hogs turned in. The next year more of the orchard was included and more hogs allowed to run in it. They turned over every inch of the sod and kept down the weeds, and the trees bore a good crop. This year the fence was moved to include two rows of trees formerly in the sheep pasture, and the improvement is very marked. The difference in the two parts of the orchard where the hogs and sheep run is so much in favor of the former that it can be seen for half a mile.

Young orchards should be given a thorough cultivation during the first few years after planting, providing sufficient fertilizing material is supplied. Many of the most profitable orchards are on such steep hillsides that they cannot be cultivated, and in these is the place to let the hogs do the work. While an orchard will do well in sod if thoroughly mulched, yet it will do better if the sod is turned under, the soil stirred and loosened about the trees.—*Farm and Home.*