

Questions and Answers

We are opening this question and answer page and hope that the readers will use it. We feel that it might be helpful to have a "traders' column" and shall be glad to print any reasonable offers, want ads, etc., but shall not assume any responsibility for the transactions which may grow out of any printed notices.

In regard to bio-dynamic products see note on last page for procuring the right to use the new trade mark "Bio-Dynamic Products."

THE PUBLISHERS.

Question: Regarding an orchard growing under rather hot and dry climatic conditions. There is a relatively small plantation of apple, olive, peach and plum trees. The apple and olive trees are from one to three years of age. Some of these are expected to bear fruit this coming summer. It is desired to make a new apple and peach orchard, owing to profitable nearby markets. The young apple trees are now being pruned, the branches are being cut to give the trees a good shape. Different pruning for each tree, according to a new "scheme," to keep the tree small, with strong outer branches, as clear as possible in the middle, to get plenty of air and sun and to facilitate fruit gathering from the ground, with no need to break the branches—also when spraying it can be done from the ground. What instructions could be given to improve the condition of the present orchard? What should be done in connection with starting the new one?

Answer: The treatment of an orchard under the described conditions does not differ greatly from the treatment of an orchard in a more northern climate (see instructions given in "Practical Guide to the Use of the Bio-Dynamic Preparations"). However, from the fact that there are olive trees growing, I gather that there is no frost in winter and that the summer is rather dry and hot. In this case it would be advisable, besides the treatment of the trees, to protect the ground and guard against it drying out and losing humus content. This could be done in two different ways:

First—a permanent and complete cover with perennial grasses and clover.

Second—a temporary covering for one to two years and one year open and tilled land.

Not knowing the kind of soil and climatic conditions prevalent I am unable to give advice for the actual seeds or cover crops. The local people and agricultural authorities should give this advice. I remember having seen a very nice cover crop in California of clover and 15% mustard, mixed, which was cut once or twice during the year. This orchard was irrigated.

The cover crop should be cut and used for feeding (hay or green). It could also be used for making compost which should then be added to the land the following year. In Florida I have seen a cover crop of *crotalaria*, a

legumious plant which does well even in sub-tropical climate. Probably crotalaria and Bermuda, or Sudan grass and Lespedeza (two varieties: Korean—annual, Sericea—perennial) could be used. The perennial crop should be improved by using compost. This would also help by adding fertility to the trees.

After an annual crop has been harvested and composted, the ready compost material on hand should be disked or plowed in. Tilling in an orchard should never go too deep as it should help the tree roots but not destroy them. With the small type of tree it is best to mulch the ground, as the fine hair roots grow near the surface. A medium amount of ripe compost or half-decomposed material is suggested. No fertilizer for an orchard should be rich in nitrogen. Therefore, avoid fresh manure and as to decomposed, prepared manure, use only in proportion of one-third to two-thirds of compost, if such manure is used at all.

The trees should be treated as described in our bio-dynamic publications. This is spraying or using the tree paint (mixture of cow dung and clay to which 500 is added—one portion to 20 gallons of tree paste—and also one portion of equisetum). Nasturtium may be planted around the tree, 2 to 3 seeds to each tree. The spray preparation 500 may be given in the fall as well as in the spring when the first buds open. After blossoming 501 should be applied.

As to pruning the "New Scheme" might be all right. The idea of having a lot of air and sunlight is good. However, with every kind of pruning a balance between the fruit bearing shoots (the short ones) and the vegetative (long) ones must be maintained. If a tree is pruned so that it has mostly fruit bearing shoots, it will bear to death, especially if it should be undernourished. On the other hand, if a tree develops too many leaf shoots (long ones) it is generally a symptom of poor or faulty nourishment. In that case the preparation 500 as a spray and a proper cover crop should help.

The small type of tree mentioned gives an early and heavy crop but this kind of orchard is generally short-lived.

The same treatment as recommended for apple, peach and plum trees may be applied to olive trees.

When planting a new orchard use very fine well-rotted compost in the hole itself, about one pound per hole. When the tree is planted and the ground well soaked through rain or irrigation, put compost on the surrounding soil. If using small transplants, dip the roots in a solution of 500 (one portion to six gallons of water) and put them into their holes immediately thereafter. This will enable the plant to grow faster and with more and stronger roots.