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OVERHEAD IRRIGATION FOR AVOCADOS

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The writer recently installed a complete overhead system on 31 acres of avocados which is working well. The total cost of materials and labor was $306 per acre. This made unnecessary any leveling of the land and as it is used in place of the usual irrigating system it is only fair to subtract $50 per acre as the usual cost of these items and conclude that the overhead cost $256 more than the ordinary way. In this case the water is supplied under pressure; where it is not available under pressure, it is necessary to install a settling basin and pressure pump. This can be done from $600 to $1,000, depending on the type of equipment used. Such a pump will handle a large acreage and its cost when distributed does not amount to much.

There is no longer any question but that overhead irrigation is good for avocados as there are many instances where avocados have been under this system for years and they are certainly thriving. The only disadvantage of overhead irrigating is the high first cost of installation, but it soon pays for itself and besides that there are at least twenty outstanding advantages which I may enumerate as follows:

1. The ability to apply the water when and where it is needed. Easier to spot irrigate where needed.
2. Economy. No loss of water through run-off or excessive percolation near head ditch.
3. Reduction in loss from evaporation where sprinkling is done at night.
4. Uniform distribution over 100 per cent of the root area. No dry spaces and dormant roots between large trees in the rows.
5. No washing of soil to the lower ends of the rows and banking up above bud unions.
6. Keeps foliage and fruit clean of dust and dirt.
7. Eliminates necessity of deep plowing for the purpose of covering manure or cover crops and for redistributing nitrates.
8. Eliminates plow sole on most soil types.
9. Saves the expense of leveling land, which results in removal of rich top soil from high places, leaving barren spots in grove.
10. Brings about a perfect downward distribution of nitrates and humus to the subsoil without carrying them beyond the reach of feeding roots.
11. Reduction in amount of fertilizer needed through much more efficient utilization of what is applied.

12. Intermittent sprinkling during hot spells in June and July reduces temperature as much as 20 degrees and by increasing humidity reduces June drop of young fruits.

13. Uniform germination and growth of cover-crop over entire area.

14. Saves the expense and bother of furrowing out.

15. Saves labor and time as constant attention is not necessary.

16. May be of some value as a preventive of injury from light frosts.

17. Easier to watch than furrows as the operation of the entire system may be observed from one point.

18. Elimination of washouts from gopher holes.

19. No valves or cement stands at ends of rows to run into and break with the tractor, or to harbor mats of Bermuda grass, etc.

20. Is a more natural system, resembles rain and produces a more normal and thrifty growth of trees.