

a deficiency of healthy sap, makes it more easily assailable by diseases such as mildew, rot, &c., and may have the effect of rendering it less able to endure the severity of the winter.

It would be easy to ascertain by actual experiment whether exposing the fruit to the direct rays of the sun has the effect of accelerating the ripening process; but in the absence of such evidence, it will suffice to say, that without leaves fruit will neither grow nor ripen; and in some cases it would appear that it ripens more rapidly in the shade, for it has been observed that grapes grown nearest the ground, and therefore most in the shade, are not only the largest and finest flavored, but ripen several days earlier than those grown near the tops of trellises. What says the editor of the *Pacific Rural Press*? "The largest, sweetest, and best flavored fruit to our taste, is to be found on vines trained about two feet from the ground and *well screened from the direct rays of the sun.*" I have been advised to take the leaves off tomato plants with a view of hastening the ripening process, and have seen that course followed by others, but never could perceive any beneficial results; in fact, it rather appeared as though the plants devoted their whole energies to renewing or replacing the leaves that had been so ruthlessly cut away; and the ripening, while this was going on, was rather retarded than otherwise.

The annual pruning of vines so generally practised, whether done in the fall, the winter, or the spring; whether on the renewal system or any other system, is not less injurious to the general health and productiveness of the vines than that above referred to as summer pruning.

There is throughout the vegetable kingdom, when nature is allowed to take its own course, a certain balance preserved between the roots on the one hand, and the leaves and branches of all trees and plants on the other; and to secure the best results, it is necessary that this balance should be maintained. It is just as important for the health of the roots, that a certain surface of leaves and branches should be exposed to the sun and air, as it is that there should be a sufficiency of roots to keep those leaves and branches in a healthy condition; and nature when left to herself always preserves this uniformity. The annual pruning of grape vines destroys this balance, by continually cutting down the branches, while the roots are allowed to grow unchecked; and the sap that should be chemically changed by the action of the sun on the surface of the leaves, is not so acted upon as to allow