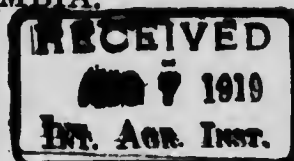




PROVINCE OF BRITISH COLUMBIA.

DEPARTMENT OF AGRICULTURE
(HORTICULTURAL BRANCH).



ORCHARD COVER-CROPS.

IN fruit-growing sections there is not enough barnyard manure to keep up the soil-fertility, and some other method must be used. Cover-crops add organic matter to the soil, and if they are leguminous crops add nitrogen. They do not altogether replace barnyard manure, but will do more toward keeping the orchard up to a high standard of production than any other one method we can use.

Humus necessary to a Productive Soil.

The maintenance of the productive power of soils depends in a large degree upon the upkeep of the vegetable matter in the soil. Humus is one of the last stages in the decomposition of the vegetable and animal matter in the soil, and its benefits may be summed up as follows:—

- (1.) A well-drained soil rich in humus is rich in nitrogen.
- (2.) Evidence shows that, in the process of the formation of humus, acids are produced which are capable of dissolving mineral plant-food, and in all probability this is how they become available to the plant.
- (3.) Humus increases the water-holding capacity of light soils by consolidating them and making them less porous. It acts as a soil sponge.
- (4.) It ameliorates heavy soils, making them less liable to bake and puddle, so that proper aeration is secured.
- (5.) Humus generally increases the warmth of the soil. The dark surface draws more heat than the lighter-coloured one.
- (6.) Humus furnishes food material for bacterial action in the soil

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