thrive at all, or fail utterly. Plants may be divided for the purposes of this paper into "Shade Enduring," "Light Enduring," "Shade Needing," "Light Needing."

Plants which need shade will not endure bright sunlight, hence many wild flowers growing naturally in very shady woods soon die if exposed to bright sunlight. On the contrary, plants which need light will soon die in dense shade. Examples of these are the birch and poplar, which, when they have abundant light, grow rapidly, but if shaded, will soon die. Then there are the shade enduring trees, such as the spruce, cedar, beech and hemlock, which will live for years under dense shade; and there are the light enduring species, such as some of our wild flowers, which succeed best in shady places, but will also thrive well in bright sunlight.

Plants which grow naturally in shade are not great seed producers, but to make up for this they often increase very rapidly by offsets, layers and suckers. It is interesting to note that a large proportion of the plants in woods are spring flowering species which bloom before the leaves of the trees are fully out and before there is dense shade. Most plants need abundant sunlight for great seed production as it is through sunlight and by the aid of the leaves that the nourishment necessary for the production of seed is secured. For example, take the weeds which are great seed producers. Of the many plants which have become weeds here there are very few which are natives of this country, as most of our species are woodland plants and also do not succeed well in the open, while the introduced weeds have been grown in open ground for centuries. The asters and golden rods, which are abundant seed producers, are native plants. These grow naturally in meadows or open woods.

Most of our cultivated fruits are light needing plants thriving best and producing the largest crops in full sunlight and the foregoing information has been given with a view to impressing this fact on fruit growers. Plants take food from the soil and air. From the soil, the plant food passes up through the young wood in crude sap, which, on being distributed through the leaves, is changed by the action of sunlight and other agencies and becomes what is known as "elaborated" or made fit to add new tissue to the plant. This elaborated sap returns between the bark and the young wood and is distributed over the plant as required. It descends to the roots and in the case of herbaceous biennials and perennials it accumulates there and this plant food is stored up and made available for leaf or seed production the following year, as in the beet, turnip, carrot, mangold, and onion, which in