

a long tube gradually works its way down the pistil tube reaches the seed, the liquid then empties itself and fertilization is complete. The fertilized flowers remain on the tree while the others fall off, and a certain portion of the former, according to the nature of the plant, begin to swell.

Thus, in the case of the cherry or plum it is the surrounding or casing of the seed which increase in size and forms the soft inner pulp covered again by a skin. A fruit of this kind is called a drupe.

A raspberry or a blackberry is on the same principle, but in an aggregated form; a number of small cherries, so to speak.

The apple and pear are formed practically by an enlargement of the calyx. The remains of the calyx and sometimes traces of the stamens are to be found in the eye of the fruit. The five cells of the pistil can easily be traced forming the core, while the seeds are the real fruit from a scientific point of view.

In the same manner the currant, gooseberry, or grape are all real berries, the remains of the calyx being easily seen at the top of the true fruit.

In the same manner may be classed pumpkins and gourds.

The strawberry presents all its seeds above the commercially called fruit, which is merely the enlarged receptacle.

So far I have only described the complete flowers which have all the essential organs on the same flower, and the process is simple.

Many flowers are not complete, some have only stamens and are called male flowers, some only pistils and called female flowers. These may occur on the same plant as, for instance, in corn, the staminate flower being the handsome plume while the pistils form the well known tassle.

The difference is noticeable in the cucumber, the female flower having a longer stalk but no anthers.

In other plants one individually will bear all female flowers and requires the proximity of a male plant to accomplish fertilization.

For this reason it is necessary to mix the varieties of strawberries as some varieties do not have enough male flowers to get a good crop, or vice versa.

But even in complete flowers nature often seems to dislike self-fertilization, and frequently the stamens are withered away by the time the pistil is ready and which has to depend, of course, on some other flower.

This has been noticeable in the case of orchards where there are large blocks of one variety, only the outer trees have borne fruit

Duncans:

ANTHER

- PETAL

- PISTIL

- SEPAL

- OVARY

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