

The Evolution of Fruit Tree Productivity: A Review. *Domestication* of fruit trees has received far less attention than that of annual crop plants. In particular, very little is known about the evolution of fruit tree productivity. In the wild, most tree species reach reproductive maturity after a long period of juvenility and even then, sexual reproduction appears sporadically, often in a mode of *masting*.

Environmental constraints limit trees' reproductive activity in their natural, wild habitats, resulting in poor, irregular productivity. Early *fructification* and regular, high rates of productivity have been selected by people, unconsciously and consciously. The reviewed evidence indicates an evolutionary continuum of productivity patterns among trees of wild habitats, intermediary domesticates, and the most advanced domesticates. Alternate bearing appears to represent an intermediate step in the fruit tree evolutionary pathway. The existence of a molecular, genetic mechanism that controls trees' sexual reproduction and fruiting pattern is suggested.

What did domestication mean?

Domestication is the process of adapting wild plants and animals for human use. Domestic species are raised for food, work, clothing, medicine, and many other uses. Domesticated plants and animals must be raised and cared for by humans. Domesticated species are not wild.

Masting is a process of agricultural production which involves the release of large amounts of seed by trees or other plants in cyclical periods. The process is often referred to as masting or mast seeding.

What is the meaning of *fructification*?

: the reproductive organs or fruit of a plant. especially: sporophore

What is the meaning of being *juvenile*?

showing incomplete development: immature, childish. : of, relating to, or characteristic of children or young people.