

⇒ Concept of origine & their importance with reference of Varilov.

Introduction -

The ancient views regarding the origin of cultivated plants as suggested by religious scholars were that they are divine gift of God to man of this planet earth. Alexander von Humboldt (1807) said we know nothing of the original sources of our most useful plants, their origine is an impenetrable secret!

Charles Darwin suggested that the cultivated plants originated of cultivated plants from the modification of wild ancestors.

Gregor John Mendel (1865) published his monumental work and explain the origine of cultivated plants to hybridization & natural selection.

~~M.I. Varilov~~ N.I. Varilov (1887-1943) the famous Russian botanist, explorer of crop geograph & genetics on the basis of his painstaking efforts & various evidences contributed to the origin of cultivated plants.

His deductions were based on a variety of evidences, obtained from morphology, anatomy, cytology. He collected data from different parts of the world about the distribution & ancestor of cultivated plants & published his result in (1926). He recognised Centre of origin where two or more species crossed together & where natural & artificial selection occurred subsequently.

N.I. Vavilov (1926) recognised eight centres of the origin of cultivated crop plants.

1. Chinese Centre -
2. Indian Centre
3. Central Asiatic Centre
4. Near Eastern Centre
5. Mediterranean Centre
6. Abyssinian Centre.
7. South-Mexican & Central American Centre.
8. South American Centre

Chinese Centre -

A Centre of origin is a geographical area where a group of organisms either domesticated or wild. They are also considered centres of diversity.

The origin of crop plants is basic to plant breeding. This allows the wild relatives, relative of species & new genes, knowledge of the origin of crop plants is important in order to avoid genetic erosion.

(three in 1924,
five in 1928,
six in 1929,
seven in 1931,
eight in 1935 & reduced to seven again
in 1940)

1. Chinese Centre.

Earliest & Largest independent centre of origin of cultivated plants. It includes the mountainous regions of Central & western China & the adjacent Lowlands. A total of 136 endemic species were listed. This centre includes —
millets, soyabean, Bamboo, Onion, egg plant
Cucurbits, Citrus species, sugar cane, tea,
etc

Fruits & Nuts — Pear, Chinese apple,
Peach, apricot, walnut, litchi,
orange.