

SCIENCE

KINGDOM PLANTAE

KINGDOM-PLANTAE

It is a kingdom of multicellular photosynthetic organisms having cellulose cell wall. Eichler (1883) divided the kingdom plantal into two subkingdoms, cryptogamae and phanerogamae.

Subkingdom Cryptogamae: (Gk. cryptos – hidden, gamos – marriage). The reproductive organs are inconspicuous. Flowers and seeds are absent. The embryo, if present, is naked. Plants of subkingdom cryptogamae are also called lower plants, flowerless and seedless plants. There are three divisions in this subkingdom thallophyta, bryophyta, pteridophyta.

Subkingdom Phanaerogamae: (Gk. phaneros– visible, gamos – marriage). The plants of subkingdom phanaerogamae have well differentiated and evident reproductive organs like seeds. Therefore, they are also called Phanaerogamae has single division of spermatophyta.

Differences Between Cryptogamae and Phanaerogamae:

Cryptogamae	Phanaerogamae
1. It contains seedless plants.	1. It contains seed producing plants.
2. It has both vascular and nonvascular plants.	2. It possesses only vascular plants.
3. Fertilization occurs in water only.	3. Water is not necessary for fertilization