

## DICOTYLEDONOUS PLANTS

Biology Shodiyeva Salomat Abdishukurovna

Tashkent City Sergeli District 55-School

### Abstract

Plant taxonomy is one of the oldest fields in biology. Of course, this field was created out of necessity. The modern plant system is based on long-term research, observations, and paleobotanical evidence. In this article, we will focus on dicotyledonous plants and their importance, as well as examples in nature.

**Keywords:** biology, dicotyledonous plants, tulips, flora, green world, plant history, etc.

### Introduction

It should also be noted that the classification of plant taxonomy was initially understood differently by people. That is, the plants were divided into different groups depending on their importance. For example: food, medicine, fodder, poisons, dyes and so on are divided into groups according to use. Plant systematics was first studied and propagated by the famous Greek scientist Aristotle (384-322 BC). Aristotle's Theory of Plants has not survived to our day. He described more than 100 plant species in his time. A student of Aristotle on plant taxonomy. Theophrastus (371-285 BC) founded. He studied plants in detail, wrote a 10-volume work entitled The Natural History of Plants, and compiled about 450 plants based on their life forms and ecological characteristics.

Dicotyledons are a class of closed-flowered plants. They have two seeds (hence the name). The leaves are reticulate, the stems and roots have a separate tissue-cambium, and the flowers are usually 5 or 4-membered, with a thickening of the cambium stems and roots. They consist of grass, trees and shrubs. It contains more than 175,000 species of flowering plants belonging to 360-370 families. There is no universally accepted system of Dicotyledonous, and their origin and phylogenetic relationship have not been determined. It grows in many places with different soil and climatic conditions. The size, shape, morphological and anatomical structure of the Dicotyledonous, as well as the structure of the reproductive organs, are extremely diverse. Dicotyledonous plants are found all over the globe. Two-seeded plants include potatoes, peas, beets, melons, watermelons, grapes, apples, cotton, and sunflowers. The scientific name of any plant can be found in special books (flora or can be found in the plant identifier). Close categories merged, forms a family. For example, almonds, apples, apricots, namatak, and hawthorn combine to form a class. For example, families of monocotyledonous plants, such as tulips, wheatgrass, and chrysanthemums, come together to form a class of monocotyledonous plants.

---

Rhizomes, dicotyledons, dicotyledons, dicotyledons, dicotyledons, dicotyledons, dicotyledons, dicotyledons. Families like florists unite to form a class of dicotyledonous plants does.

Of the 175,000 members of the 340 families of the dicotyledonous plant class more plant species. In Uzbekistan, this class belongs to 138 families. There are about 37,000 rounds. For dicotyledonous plants:

Family of friends

Family of relatives

Family of florists

The Anglo-Saxon family

The family of lizards

Vitaceae family

The pumpkin family

Apiaceae family

Includes families of cousins.

Dicotyledonous plants are involved in the biological cycle of phosphorus and sulfur, which are part of many other substances, such as proteins and several organic compounds. When these plants die and their bodies break down, these elements fall back into the soil. Thus, if there were no vegetation on Earth, other forms of the organic world (humans, animals) would not exist. The organic matter they contain (proteins, carbohydrates, fats) is consumed by humans in the form of bread, vegetables, fruits, or given to cattle. Humans use plants as building materials, fiber for weaving fabrics, raw materials for paper products, and fuel. Many of them are medicines, additives and dyes is obtained. There are some species of plants that cause great harm to humans. Others cause serious diseases in animals. Lots of crops diseases are also related to the activity of parasitic fungi. There are also many species that suffocate crops in the fields. Tulips and daisies are both beautiful flowering plants. However, they do not fall into the same category of plants. Flowering plants are actually classified into two categories based on their embryo, called Monocotyledonous (monocot) plants and Dicotyledonous plants. Plants can be broadly classified into flowering and non-flowering plants. Flowering plants are called as angiosperms while non-flowering plants are known as gymnosperms. Angiosperms are further classified based on the nature of the embryo in the seed into Monocotyledonous and Dicotyledonous plants. Dicots are plants that have seeds with two cotyledons and so are termed as dicotyledonous plants. Examples: Sunflower, Mango Monocots are plants that have seeds with one cotyledon and so they are called as monocotyledonous (monocot) plants. Example: Sugarcane, Maize.

Understanding the anatomy of these plants is useful from the horticultural and agricultural aspects. Choosing the right product for the right kind of plant is important. A herbicide or pesticide designed for a monocot might not help kill pests around a

dicot. Due to the tap root system that is found in dicots, they can penetrate deeper into the soil compared to monocots who have a fibrous root system which cannot penetrate that deep. The dicotyledons, also known as dicots (or, more rarely, dicotyls), are one of the two groups into which all the flowering plants (angiosperms) were, formerly, divided. The name refers to one of the typical characteristics of the group: namely, that the seed has two embryonic leaves or cotyledons. There are around 200,000 species within this group. The other group of flowering plants were called monocotyledons (or monocots), typically each having one cotyledon. Historically, these two groups formed the two divisions of the flowering plants. Largely from the 1990s onwards, molecular phylogenetic research confirmed what had already been suspected: that dicotyledons are not a group made up of all the descendants of a common ancestor (i.e., they are not a monophyletic group). Rather, a number of lineages, such as the magnoliids and groups now collectively known as the basal angiosperms, diverged earlier than the monocots did; in other words, monocots evolved from within the dicots, as traditionally defined. The traditional dicots are thus a paraphyletic group. The eudicots are the largest clade within the dicotyledons. They are distinguished from all other flowering plants by the structure of their pollen. Other dicotyledons and monocotyledons have monosulcate pollen (or derived forms): grains with a single sulcus. Contrastingly, eudicots have tricolpate pollen (or derived forms): grains with three or more pores set in furrows called colpi.

Traditionally, the dicots have been called the Dicotyledones (or Dicotyledoneae), at any rank. If treated as a class, as they are within the Cronquist system, they could be called the Magnoliopsida after the type genus *Magnolia*. In some schemes, the eudicots were either treated as a separate class, the Rosopsida (type genus *Rosa*), or as several separate classes. The remaining dicots (palaeodicots or basal angiosperms) may be kept in a single paraphyletic class, called Magnoliopsida, or further divided. Some botanists prefer to retain the dicotyledons as a valid class, arguing its practicality and that it makes evolutionary sense. The formation of seeds or eggs in the body's activity, water body temperature such as maintaining the same balance, being constantly on the move, breathing and circulating physical environmental forces (gravity, energy) that control processes flow, chemical reactions). For example; energy is generated when a rock larger than a rock is rolled down a cliff will be. But here the gravitational force of the earth comes from the rounding of the rock energy is equal to the environment, which stops when it comes to a certain place, alive does not directly affect the body's reproduction or respiration. Through the roots of dicotyledonous plants, it takes minerals from the soil, synthesizes complex carbohydrates, proteins, enzymes, enlarges its body and resists the physical forces of the environment. But it does not curb the physical forces of the environment, they are infinite, varied and constantly in motion, affecting living organisms in one place, in several natural forces in unity.

The environment is an ecological concept, a complex of natural elements and realities, with which living organisms interact directly and indirectly. The environment is all the natural environmental factors (air, light, soil) that surround organisms. Environmental elements affect the condition, growth, development, reproduction, distribution of organisms directly or through other secondary factors. The environment of any organism consists of many organic and inorganic natural elements, as well as artificial elements derived from human activities. All environmental factors in nature are in unity, in complex harmony, one affects living organisms over time. Such is the sum of environmental factors is called constellation. Optimal for a particular factor of the organism tolerance limit also depends on the influence of other factors. For example, optimal lack of moisture in a temperate environment, nutrients in the body the shortage increases. And with the availability of nutrients the body's resistance to changes in several environmental factors increases. No environmental factor in nature can be replaced by a second factor. Resistance of some species to any environmental factor the beginning of the change in the boundary is stronger than a factor in the studied biotope depending on the change, this factor in relation to the organisms in the environment can be considered as a limiting factor. Environmental persistence for a factor-adapted species, this factor cannot be a limiting factor. For example, Humidity for white and black saxophones adapted to the low humidity of the Kyzylkum, temperature cannot be a limiting environmental factor. If the ecological situation in the natural environment changes, of course, the place is ecologically the interrelationships of the factors also change. Therefore different regions limiting factors are not the same. For example, certain species in the north increase, the limiting factor in the spread is the lack of heat, the south and in districts, humidity, nutrient deficiencies, and high temperatures are limiting factors. An environmental factor itself is one place at a time, for one species due to the limiting factor, and then the essence of this factor changes. Such a situation can be seen during the development of organisms. This is because dicotyledonous plants are sensitive to changes in environmental factors during the breeding season. For example, during the germination, stemming, spike, and comb formation of some species, environmental factors have different effects. Primary periodic environmental factors. In grouping environmental factors, organisms that are sensitive to the effects of these factors to know their degree of adaptation as well as to take into account their circumstances need. Because the adaptation of organisms to the environment is based on ecology laws, i.e. the interrelationship between an organism and its environment.

The ecological range of dicotyledonous plants can also be drawn in relation to factors such as heat, soil salinity, and wind resistance of plants. In the meadows, the groups, types of plants and the rows they form also change from low to high, from plain to hilly. Within a row of plants can be distinguished 6–8–10 lab, their associations. It is sometimes difficult to define boundaries within them. Because of the gradual change

of ecological conditions in this area, the spread of species within one phytocenosis to another cenosis area and the formation of intermediate small cenoses confuses the boundaries of phytocenoses. The large and small habitats within the cenoses of two-stemmed plants found in nature often do not coincide with each other, as each species adapts to environmental factors on its own, accepting their effects on its own. Ecological individuality of species, their adaptation is a set of traits derived from the process of heredity and development. These qualities occurs during the development (ontogeny) of the organism, representatives of the species occurs in the state of genotype and phenotype. Populations found in nature there will be no representatives of the same species resembling each other. To the representatives of this species In addition to their inherent characteristics, their ecological individuality arises in different cases will come.

Individuals of the species that make up the majority of populations found in nature are more or less ecologically dependent on one or another environmental factor in proportion. For example, some individuals are very sensitive to temperature drops if sensitive, the second is more resistant, and the third individual is less airy can not tolerate even drying, another grows in very dry places. Ecological individuality within populations, representative of this species vitality, tolerant of adverse conditions, tolerant, preserved species allows it to remain. In terms of the location of dicotyledonous plants, northern moisture-loving plants are located on the northern slopes of slopes within the boundaries of their southern habitats. Southern heat-loving plants, on the other hand, grow on the southern slopes of the slopes, which are strongly heated by the sun as they move north. The rule of location of dicotyledonous plants can be clearly seen only in areas where complex environmental factors are encountered in mountainous areas.

## References

1. Burigin V.A. va b. Botanika va osimliklar fiz. O'qituvchi.T.1972 yil
2. Nabiyev M. va boshqalar. Qiziqarli Botanika. O'zbekiston. T., 1975 yil.
3. Малкина Л.Г. Атроф tabiat bilan tanishtirish. «O'qituvchi». 1987 yil
4. Mustaqimov G. O'simliklar fiziologiyasi.(Amaliy mash.) T.1990 yil
5. Habibov Z., Jabborov M., Sheraliyev M. Tabiatshunoslik. T., 1990
6. Haydarov Q, H.Haydarov. Tabiatshunoslik asoslaridan laboratoriya mashg'ulotlari. T., 1990
7. Григорьянц А.Г Табиатshunoslikni o'qitish. Toshkent.1992. yil.
8. Velikanova L.L.Tuban o'simliklar. O'qituvchi. Toshkent. 1995 yil.
9. Otaboyev Sh., Nabiyev M., Inson va biosfera. Toshkent. 1995 yil.
10. Piratov O'.va b.Botanika 5-6 sinf uchun darslik. O'qituvchi.T.2001 yil.
11. Piratov O'.va b.Botanika 6 sinf uchun darslik. O'qituvchi.T.2003 yil.