

Ray defined a *species* as all similar individuals exhibiting constant characters from generation to generation, while, according to Linnæus, each species was descended from an originally created pair. "There are as many species", he said, "as issued in pairs from the Creator's hands," and each species expressed an idea in the Divine mind. This conception of species was generally held until the publication of the "Origin of Species" in 1859.

According to Darwin, however, classification meant the grouping of organisms to show relationships due to community of descent. He likened the affinities of all the beings of the same class to a great tree where the green and budding twigs represent existing species and those produced during former years the long succession of extinct species.

As a result, the Linnæan conception of species has been modified. Darwin and many investigators since his time have shown that Linnæan species are really groups of closely related forms, and that it is often impossible in nature to determine their limits on account of the large number of intermediate forms.

The idea of *species* is, therefore, an "abstract one: in nature there are no species—only individuals." The term, however, is still retained as a convenient one by systematists to designate all the individuals which agree in all essential features and live, as nearly as possible, under similar external conditions.

De Vries believes that his "elementary species" and "varieties" are the real units in nature. Individuals are considered as aggregates of "unit characters" which may combine in various ways, thus making it impossible to keep the group called a "species" as a definite entity.

The classification of organisms has, therefore, passed through four eras: 1. the *Pre-Linnæan*, 2. the *Pre-Darwinian*, 3. the *Pre-Mendelian*, and 4. the *Post-Mendelian*.

The *Pre-Linnæan* era (—1753) is characterized by crude unsystematic attempts at classification; the *Pre-Darwinian* era (1753–1859) by the introduction of system, frequently unnatural, and with distinct barriers between the members of each group; the *Pre-Mendelian* era (1859–1900) by the evolutionary conception of community of descent with the barriers between species more or less broken down; and the *Post-Mendelian* era (1900– ) by the unit-character conception of individuals and the introduction of De Vries' 'elementary species' and 'varieties' as the real units in nature.