

Contributions of Linnaeus

Mainly the impact of *Systema Natura*. By the 10th edition it was an exhaustive list of species known to science with:

1. binominal nomenclature
2. telegram-style diagnoses
3. standardization of synonymies
4. classification by hierarchy

He also contributed many other systematic procedures (particularly in botanical systematics – terminology for plant morphology including standardization of sexual characters)



“Thus Linnaeus’s 1738 polynomial for this species was

Veronica foliis oppositis, caule spica terminato, i.e., 6 words;

his 1745 polynomial

Veronica floribus spicatis, foliis oppositis, caule erecto, i.e., 7 words;

his 1753 polynomial

Veronica spica terminali, foliis oppositis crenatis obtusis, caule adscendente simplicissimo, i.e., 11 words.

The alternative two-word name

Veronica spicata,

introduced by Linnaeus in 1745 and retained by him in 1753, has remained unchanged to the present day. These two advantages were in fact noted by Linnaeus in his *Philosophia botanica* no. 257 (1751)” Stearn (1959)

Linnaeus' Higher Classification

recognized four categorical levels below kingdom:

1. class,
2. order,
3. genus,
4. species

Kingdom, Phylum, and Family added later.

Taxon - a group of related species worthy of ranking.

Category - a formal rank in the Linnean Hierarchy

Because he rejected evolution, he did not have compelling explanation for the cause of the hierarchical structure.

References

Stearn, W. T. (1959). The background of Linnaeus's contributions to the nomenclature and methods of systematic biology. *Systematic Zoology*, 8(1):4–22.