

# Type Concept

The various methods of designating types for genera and species are given below:

## ☉ For Genera:

1. Type by original description
2. Type by original indication
3. Type by monotype
4. Type by tautonymy
5. Type by subsequent selection

## ☉ For Species:

1. Holotype
2. Paratype
3. Allotype
4. Syntype
5. Lectotype
6. Neotype

# For Genera

**Type by original description:** Publication or creation of a new genus for the first time, one of the included species (=nomial species) is clearly and definitely marked and stated as the type.

**Type by original indication:** At the time of original establishment of a genus, if one of the included species has a name as *typicus* or *typus* that become the type species by original indication.

# For Genera

**Type by monotype:** Any genus with a single species at the time of description, that species becomes automatically the type by monotype.

**Type by tautonymy:** In case where the genus has not been designated any type species originally or indicated but contains more than one species and if amongst the included species anyone with the same specific name as that of genus that species becomes the type by tautonymy.

**Example:** *Muraena angullia* becomes the type for genus *Anguilla* by absolute tautonymy.

# For Genera

**Type by subsequent selection:** If an author in establishing a nominal (=valid) genus with more than one species failed to designate type species by any previously mentioned provisions, a subsequent author or reviser select one as type.

**Example:** *Asidoparia sardina* is type for genus *Asidoparia* by subsequent selection

# For Species

**Holotype:** The single specimen designated or considered as the type by the first author at the time of publication of the original description of the new species or the only specimen known at the time of the establishment of the species.

**Example:** *Heteropneustes longipectoralis*, the new species described from 04 specimens, one designated as holotype and three remaining as paratype.

**Paratype:** A specimen or specimens other than the holotype which is available to the author at the time of description of the new species and which is/are designated as such or clearly indicated as being the material on which the original description is based.

# For Species

**Allotype:** A paratype of the opposite sex to the holotype which is designated or indicated as such.

**Syntype:** One of the several specimens on whom an author bases his original description but does not designate or indicate any specimen or specimens as the holotype or paratype. All such specimens become syntype

# For Species

**Lectotype:** One of a series of syntypes which is selected subsequently to the original description and henceforth serves as the definitive type of the species

**Neotype:** A specimen is selected as the neotype subsequent to the original description in cases where the primary type material are known to have been definitely lost, destroyed and not available anywhere in any museums for comparative study and reference purpose.

# Some definitions regarding selection of types

**Nomen dubium** (doubtful name) is a name representing a taxon that is not identifiable from the original description or from available type materials.

**Nomen novum** (new name) expressly proposed as replacement name for an earlier preoccupied name.: aming, according to a formal system.

**Nomen nudum** a published scientific name which does not meet the requirements for availability as defined by the rules of the ICZN.



# Some definitions regarding selection of types

**Nomen rejected:** A rejected name.

**Nomina conservanda:** Name whose usage has been preserved by agreement or decision in spite of actual or potential conflicts with established rules of nomenclature.

**Nomen oblitum:** A name forgotten, i.e. senior synonym which remained unused for over 50 years.