Taxonomy system and linnaean system

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Since the early life of human beings, we have grouped organisms into classifications for many different reasons related to science. “ The classification systems are very important because it allows scientists to easily identify and group organisms” (socratic. org, 2017). “ Scientist usually group them by judging the degrees of their similarities and differences that are seen” (study. com, 2017), Organism groups have been organised into groups by using systems called the taxonomy system and Linnaean system but changes have occurred over time and this has all been modernized into the phylocode since early 2000’s.

This first system that will be explained is the Linnaean system, this was developed in the early 18th century by Carl Linnaeus which he published a system for classifying living things but Linnaeus was the first scientist to develop a naming system or structure that helped convey information easily about what the species name is but also its closest relatives. “ These classifications were further modernized into orders such as taxonomy and including domain phyla domain, kingdom, phylum, class, order, family, genus, and species” (Mnemoic-device. com, 2017). Before Carl Linnaeus came up with a standard naming system he created names for each individual species which were often confusing and enormously long and hard to remember.

Carl Linnaeus then decided it would be better to name these species in Latin and would have two parts to the name and this was a two-part system which was named the binomial nomenclature but again this is the old system. Linnaeus is classified nature into a hierarchy, “ Carl proposed that there were three broad groups and these were called kingdoms. Then into which the

whole of nature could fit, these kingdoms were animals, plants, and minerals. He divided each of these kingdoms into classes.” (Study. com, 2017)

These were further divided into genera and then species. We still use this system today, but society today has made some changes. The hierarchy of biological classifications is where all life can be classified into increasingly specific groups by sorting life into three domains which are Archaea, eubacteria and eukaryote-but the system ends with the most specific category which is the individual species has its own name.

The Phylo code starts with the theoretical foundation but the phylo is the process of a naming system but only names the clades which a clade is a group of organisms that consists of a common ancestor and all its lineal descendants instead of naming each individual specie a different name. The naming of the clade in these species are defined in types although the aim of the new classification system is to show clear communication of naming and efficient storage of biological information but again the phylo only governs by the clade names.

“ The phylo system is and independent of taxomic rank but also the phylogenetic system categorisers species. clades but are not in ranks but are kinds of biological entitles where species is a segment of population and the clade is in a monophyletic group of species or organisms.”(—– The monophyletic is a taxon. “ A taxon is any group of organisms that is given a formal taxonomic name, A monophyletic taxon is one that includes a group of organisms descended from a single ancestor. whereas a polyphyletic

taxon is composed of unrelated organisms descended from more than one ancestor”. (Mun. ca, 2017)

Taxonomy is used as the prime base for the phylo system and Linnaeus system, taxonomy is the process of explaining and classifying organisms and includes all plants, animals and microorganism in the world. Taxonomy explains and shows what species are compatible to reproduce or interbreed and which can’t together but for example a horse cant interbreed with a bear but species of animals that are in the same group can like a tiger and jaguar. “ The genus is a taxonomic rank which is lower than family in the Linnaeus system and higher than the species.” (Em. wikipedia. org, 2017)

The genus is a more general taxonomic category than species is (etc. generic name of a lion is pantherea Leo and the pantherea represents a tiger, snow leopard, jaguar and leopard but Leo represents the type of animal but that it’s in this certain cat family). The species is the last rank division, in this case named epithet. This is the second part of the scientific name and refers to one species within the genus, Species is commonly a group of organisms that have similar anatomical characteristics and reproducers that can successfully interbreed to produce off spring.

“ Both the phyllo and Linnaeus have the objective to name species and give society and scientists a greater understanding of them but also they both use taxonomy as their base” (Ca1-tls. edcdn. co, 2017). The two classification systems both use precedence and clear order of preference to determine the correct name of taxon synonyms, homonyms exist in both systems but also systems are ranked through the taxonomy system.

Phylo code is a more fitting to the future of science and will develop as time goes but Linnaean system is no longer an easier source to use because Phylogenetic classification has two main advantages over the Linnaean system. First, The phylogenetic classification tells you something important about the organism: its evolutionary history. Second, “ phylogenetic classification does not attempt to “ rank” organisms , Linnaean classification “ ranks” groups of organisms artificially into kingdoms, phyla, orders, etc. (Evolution. berkly. edu, 2017) The linnean system was a great platform for biologists and scientists but now has become formally invalid due to the phylo system having a greater advantage and enhanced system.