

BOTANY EXCEL 5 - TAXONOMY AND SYSTEMATICS

1. The term **Taxonomy** was introduced by **De Candolle**.
2. Classical Taxonomy It is based on the species concept.
3. Chemotaxonomy Estimates primary metabolites.
4. Cytotaxonomy Classification based on the number and type of chromosomes.
5. Neo (New) systematics Introduced by Julian Huxley.
6. Holotype A specimen and the nomenclature type used by the author.
7. Lectotype Specimen selected from original material for nomenclatural type
when there is no Holotype.
8. Dynamic concept of species was proposed by Lamark.
9. Artificial classification Proposed by Pliny.
10. ICBN International Code of Botanical Nomenclature.
11. Taxon A group of similar and genetically related organisms.
12. Monophyletic taxon A group from which all other organisms descend.
13. Bentham and Hooker Made first natural classification of plants.
14. John Ray Introduced the term species.
15. Engler and Prantl Made first phylogenic classification of plants.
16. Father of bacteriology Robert Koch.
17. Monocarpic plants Plants flowering only once In their life.
18. Largest family Compositae.
19. Phylogenetic classification Introduced by Hutchinson.
20. Theophrastus First person made classification.

21. FAMILIES

Plant	Family
1. Gram	Leguminosae
2. Cereals	Graminae
3. Pulses	Papilionaceae
4. Potato	Solanaceae
5. Mustard	Cruciferae
6. Datura	Solanaceae
7. Onion, Garlic	Liliaceae
8. Capsicum	Solanaceae
9. Butter cup family	Ranunculaceae
10. Cotton	Malvaceae

22. Economically important plant families / plant products

Plant / product Morphology	Botanical name	Family	
1. Hemp	<i>Cannabis sativa</i>	Scitaminae	Bast fibre
2. Jute	<i>Crochorus capsularis</i>	Tiliaceae	Bast fibres
3. Sunn hemp	<i>Crotalaria juncea</i>	Papilionaceae	Bast fibres
4. Bamboo	<i>Bambusa</i>	Graminae	Stem
5. Sandal wood	<i>Santalum album</i>	Santalaceae	Stem
6. Henna	<i>Lawsonia inermis</i>	Lythraceae	Leaves
7. Turmeric	<i>Curcuma longa</i>	Zingiberaceae	Rhizome
8. Saffron stigmas	<i>Crocus sativus</i>	Iridaceae	Dried
9. Litmus	<i>Rocella tinctoria</i>	Lichen	Thallus
10. Para rubber	<i>Hevea brasiliensis</i>	Euphorbiaceae	Latex
11. Chewing gum	<i>Achras sapota</i>	Sapotaceae	Latex
12. Asafoetida roots	<i>Ferula assafoetida</i>	Umbelliferae	Resin from
13. Amber	<i>Pinus succinifera</i>	Gymnospermae	Fossil resin
14. Turpentine	<i>Pinus palustris</i>	Gymnosprmae	Stem resin
15. Canada balsam	<i>Abies balsamea</i>	Gymnosprmae	Stem resin
16. Lemon grass oil	<i>Cymbopogon citrates</i>	Graminae	Leaves
17. Lavender	<i>Lavandula officianalis</i>	Labiatae	Flowers
18. Camphor distilled	<i>Cinnamomum camphora</i>	Lauraceae	Wood
19. Eucalyptus	<i>Eucalyptus globules</i>	Myrtaceae	All parts
20. Linseed oil	<i>Linum usitatissimum</i>	Linaceae	Seed
21. Olive oil	<i>Olea europaea</i>	Oleaceae	Fruits
22. Sugarcane	<i>Saccharum officinarum</i>	Graminae	Stem
23. Sugar beet	<i>Beta vulgaris</i>	Chenopodiaceae	Root
24. Tapioca	<i>Manihot utilissima</i>	Euphorbiceae	Tuber
25. Quinine	<i>Cinchona calisaya</i>	Rubiaceae	Bark
26. Belladonna	<i>Atropa belladonna</i>	Solanaceae	Roots
27. Opium unripe capsules	<i>Papaver somniferum</i>	Papaveraceae	Latex from
28. Ergot body	<i>Claviceps purpurea</i>	Ascomycetes	Fruiting
29. Tobacco	<i>Nicotiana tabacum</i>	Solanaceae	Leaves

30. Betel	Piper betel	Piperaceae	Leaves
31. Ganga and Bhang female	Cannabis sativa	Utricaceae	Ganja – flower tops Bhang –
leaves			
32. Wheat	Triticum vulgare	Graminae	Seed
33. Maize	Zea mays	Graminae	Seed
34. Rice	Oryza sativa	Graminae	Seed
35. Barley	Hordeum vulgare	Graminae	Seed
36. Rye	Secale cereale	Graminae	Seed
37. Oats	Avena sativa	Graminae	Seed
38. Cashewnut	Anacardium occidentale	Anacardiaceae	Pedicle and Cotyledons
39. Almond	Prunus amygdalus	Rosaceae	Seed
40. Carrot	Dacus carota	Umbelliferae	Root
41. Raddish	Rhaphanus sativus	Cruciferae	Root
42. Sweet potato	Ipomaea batatas	Convolvulaceae	Root
43. Potato	Solanum tuberosum	Solanaceae	Stem tuber
44. Onion	Allium cepa	Liliaceae	Bulb
45. Garlic	Allium sativum	Liliaceae	Bulb
46. Cauliflower Undeveloped inflorescence	Brassica oleraceae botrytis	Cruciferae	
47. Bottle guard	Lagenaria vulgaris	Cucurbitaceae	Pepo
48. Snake guard	Trichosanthes anguina	Cucurbitaceae	Pepo
49. Boitter guard	Momordica charantia	Cucurbitaceae	Pepo
50. Water melon	Citrullus vulgaris	Cucurbitaceae	Pepo
51. Tomato	Lycopersicum esculentus	Solanaceae	Berry
52. Sweet orange Hesperidium	Citrus sinensis	Rutaceae	
53. Sour orange Hesperidium	Citrus aurantium	Rutaceae	
54. Lemon Hesperidium	Citrus limonia	Rutaceae	
55. Banana	Musa sapientum	Musaceae	Berry
56. Custard apple berry	Annona squamosa	Annonaceae	Aggregate
57. Date	Phoenix dactylifera	Palmae	Berry
58. Guava	Psidium guajava	Myrtaceae	Berry

59. Mango	Mangifera indica	Anacardiaceae	Drupe
60. Papaya	Carica papaya	Caricaceae	Drupe
61. Pineapple	Ananas grantum	Bromeliaceae	Sorosis
62. Cinnamon	Cinnamomum zeylanicum	Lauraceae	Bark
63. Clove flower buds	Egenia caryophyllata	Myrtaceae	Dried
64. Coriander	Coriadrum sativum	Umbilliferae	Cremocarps
65. Cardamom	Elettaria cardamomum	Zingiberaceae	Seeds
66. Fenugreek	Trigonella foenum graceum	Papilionaceae	Seeds
67. Coffee	Coffea arabica,C. robusta	Rubiaceae	Berry
68. Tea	Camellia sinensis	Theaceae	Leaves
69. Cocoa	Theobroma cacao	Sterculiaceae	Seeds
70. Ground nut	Arachis hypogea	Papilionaceae	Seed

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