# **Literature on Phylogenetic Nomenclature**

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The following is a list of publications dealing with phylogenetic nomenclature, which is intended to provide access to the literature on that subject. The list is divided into categories emphasizing particular aspects of phylogenetic nomenclature. Because these categories are not always mutually exclusive, some papers are listed under more than one category. The list is undoubtedly incomplete (particularly in the category "Other Applications of Phylogenetic Nomenclature") but should provide a good starting point for anyone wishing to explore the subject.

Because we had to draw the line somewhere, a number of related papers have been excluded. For example, we did not list all papers that used widely known names for crown clades (a convention commonly associated with phylogenetic nomenclature that is neither a necessary component of the approach nor supported by some of its advocates); instead, we only included those papers if they also used explicit phylogenetic definitions. In general, the list contains papers in which explicit phylogenetic definitions are either used or discussed.

We intend to update the list as new information becomes available. If you notice omissions or feel that a paper has been assigned to the wrong category (or should be listed under additional categories), please contact Phil Cantino (cantino@ohio.edu) or Kevin de Queiroz (dequeirk@si.edu).

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### **News Reports and Overviews:**

CANTINO, P. D. 2001. Nomenclature, phylogenetic. Pp. 242-244 *in* McGraw-Hill Yearbook of Science & Technology 2002. New York: McGraw-Hill.

FOER, J. 2005. Pushing PhyloCode. Discover (April 2005): 46-51.

HÄRLIN, M. 2004. Classification nomenclature. Pp. 52-54 *in* McGraw-Hill Yearbook of Science & Technology 2004. New York: McGraw-Hill.

HARRIS, R. 2005. Attacks on taxonomy. Amer. Scientist 93: 311-312.

HOLMES, B. 2004. Time for Linnaeus to leave the stage. New Scientist (11 Sept. 2004): 12-13.

LAURIN, M., and P. D. CANTINO. 2004. First International Phylogenetic Nomenclature Meeting: a report. Zool. Scripta 33: 475-479.

LAURIN, M., and A. DE RICQLÈS. 2004. Compte rendu sur le premier congrès international de nomenclature phylogénétique: 6-9 juillet 2004, MNHN, Paris. Bull. Soc. Française Syst. 32: 9-10.

MILIUS, S. 1999. Should we junk Linnaeus? Science News 156: 268-270.

NYFFELER, R. 1999. A new ordinal classification of the flowering plants. Trends Ecol. Evol. 14: 168-170.

PLEIJEL, F. 2000. Nomenclature linnéenne et nomenclature phylogénétique. Bull. Soc. Fran. Syst. 24: 25-28.

- PLEIJEL, F. and B. DAYRAT. 2000. De l'évolution dans la nomenclature? La Recherche 333: 48-50.
- PENNISI, E. 2001. Linnaeus's last stand? Science 291:2304-2307.
- SOARES, C. 2004. What's in a name? Scientific American (Nov. 2004): 36-37.
- SPOONER, D., W. L. A. HETTERSCHEID, R. G. VAN DEN BERG, and W. BRANDENBURG. 2003. Plant nomenclature and taxonomy: an horticultural and agronomic perspective. Horticultural Reviews 28: 1-60.
- WITHGOTT, J. 2000. Is it "So long, Linnaeus"? BioScience 50: 646-651.

#### **Formative Early Publications**

- DE QUEIROZ, K. 1988. Systematics and the Darwinian revolution. Philos. Sci. 55: 238-259.
- DE QUEIROZ, K., and J. GAUTHIER. 1990. Phylogeny as a central principle in taxonomy: Phylogenetic definitions of taxon names. Syst. Zool. 39: 307-322.
- DE QUEIROZ, K., and J. GAUTHIER. 1992. Phylogenetic taxonomy. Annu. Rev. Ecol. Syst. 23: 449-480.
- DE QUEIROZ, K., and J. GAUTHIER. 1994. Toward a phylogenetic system of biological nomenclature. Trends Ecol. Evol. 9: 27-31.
- ESTES, R., K. DE QUEIROZ, and J. GAUTHIER. 1988. Phylogenetic relationships within *Squamata*. Pp. 119-281 *in* R. Estes and G. K. Pregill (eds.), Phylogenetic Relationships of the Lizard Families: Essays Commemorating Charles L. Camp. Stanford Calif.: Stanford Univ. Press.
- GAUTHIER, J., R. ESTES, and K. DE QUEIROZ. 1988. A phylogenetic analysis of *Lepidosauromorpha*. Pp. 15-98 *in* R. Estes and G. K. Pregill (eds.), Phylogenetic Relationships of the Lizard Families: Essays Commemorating Charles L. Camp. Stanford Calif.: Stanford Univ. Press.
- GHISELIN, M. T. 1984. "Definition," "character," and other equivocal terms. Syst. Zool. 33: 104-110.
- ROWE, T. 1987. Definition and diagnosis in the phylogenetic system. Syst. Zool. 36: 208-211.

### Other Publications on the Theory and Practice of Phylogenetic Nomenclature:

- ANDERSON, J. S. 2002. Use of well-known names in phylogenetic nomenclature: a reply to Laurin. Syst. Biol. 51: 822-827.
- BROCHU, C. A., and C. D. SUMRALL. 2001. Phylogenetic nomenclature and paleontology. J. Paleont. 75: 754-757.
- BRYANT, H. N. 1994. Comments on the phylogenetic definition of taxon names and conventions regarding the naming of crown clades. Syst. Biol. 43: 124-130.
- BRYANT, H. N. 1996. Explicitness, stability, and universality in the phylogenetic definition and usage of taxon names: a case study of the phylogenetic taxonomy of the *Carnivora* (*Mammalia*). Syst. Biol. 45: 174-189.
- BRYANT, H. N. 1997. Cladistic information in phylogenetic definitions and designated phylogenetic contexts for the use of taxon names. Biol. J. Linn. Soc. 62: 495-503.
- BRYANT, H. N., and P. D. CANTINO. 2002. A review of criticisms of phylogenetic nomenclature: is taxonomic freedom the fundamental issue? Biol. Rev. 77: 39-55.

- CANTINO, P. D. 2000. Phylogenetic nomenclature: addressing some concerns. Taxon 49: 85-93.
- CANTINO, P. D. 2004. Classifying species versus naming clades. Taxon 53: 795-798.
- CANTINO, P. D., R. G. OLMSTEAD, and S. J. WAGSTAFF. 1997. A comparison of phylogenetic nomenclature with the current system: a botanical case study. Syst. Biol. 46: 313-331.
- CHRISTOFFERSEN, M. L. 1995. Cladistic taxonomy, phylogenetic systematics, and evolutionary ranking. Syst. Biol. 44: 440-454.
- DE QUEIROZ, K. 1992. Phylogenetic definitions and taxonomic philosophy. Biol. Phil. 7: 295-313.
- DE QUEIROZ, K. 1994. Replacement of an essentialistic perspective on taxonomic definitions as exemplified by the definition of "*Mammalia*." Syst. Biol. 43: 497-510.
- DE QUEIROZ, K. 1997a. The Linnaean hierarchy and the evolutionization of taxonomy, with emphasis on the problem of nomenclature. Aliso 15: 125-144.
- DE QUEIROZ, K. 2005. Linnaean, rank-based, and phylogenetic nomenclature: Restoring primacy to the link between names and taxa. Symb. Bot. Ups. 33: 127-140.
- DE QUEIROZ, K. 2006. The PhyloCode and the distinction between taxonomy and nomenclature. Syst. Biol. 55: 160-162.
- DE QUEIROZ, K., and P. D. CANTINO. 2001a. Phylogenetic nomenclature and the PhyloCode. Bull. Zool. Nom. 58: 254-271.
- DONOGHUE, M. J. 2004. Immeasurable progress on the tree of life. Pp. 548-552 *in* J. Cracraft and M. J. Donoghue (eds.), Assembling the Tree of Life. Oxford: Oxford University Press.
- DONOGHUE, P. C. J. 2005. Saving the stem group—a contradiction in terms? Paleobiology 31: 553-558.
- ERESHEFSKY, M. 1997. The evolution of the Linnaean hierarchy. Biol. Phil. 12: 493-519.
- ERESHEFSKY, M. 2001. The Poverty of the Linnaean Hierarchy: a Philosophical Study of Biological Taxonomy. Cambridge: Cambridge University Press.
- GAUTHIER, J., and K. DE QUEIROZ. 2001. Feathered dinosaurs, flying dinosaurs, crown dinosaurs, and the name "*Aves*". Pp. 7-41 *in* J. Gauthier and L. F. Gall (eds.), New Perspectives on the Origin and Early Evolution of Birds: Proceedings of the International Symposium in Honor of John H. Ostrom. New Haven: Peabody Mus. Nat. Hist., Yale University.
- HÄRLIN, M. 1996. Tree-thinking and nemertean systematics. Ph.D. thesis, Göteborg University.
- HÄRLIN, M. 1998. Taxonomic names and phylogenetic trees. Zool. Scr. 27: 381-390.
- HÄRLIN, M. 1999. The logical priority of the tree over characters and some of its consequences for taxonomy. Biol. J. Linn. Soc. 68: 497-503.
- HÄRLIN, M. 1999. Phylogenetic approaches to nomenclature: a comparison based on a nemertean case study. Proc. Royal Soc. London, Ser. B 266: 2201-2207.
- HÄRLIN, M. 2001. Towards a new biological taxonomy—let us give up the Linnean hierarchy! [Review of Ereshefsky, M. 2001. The poverty of the Linnean hierarchy.] Zool. Scr. 30: 337-339.
- HÄRLIN, M. 2003a. Taxon names as paradigms: the structure of nomenclatural revolutions. Cladistics 19: 138-143.

- HÄRLIN, M. 2003b. On the relationship between content, ancestor, and ancestry in phylogenetic nomenclature. Cladistics 19: 144-147.
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- HÄRLIN, M., and M. THOLLESSON. 2005. Fundamentals of phylogenetic nomenclatures: an exchange of views. Symbolae Botanicae Upsalienses 33: 141-151.
- HIBBETT, D. S., and M. J. DONOGHUE. 1998. Integrating phylogenetic analysis and classification in fungi. Mycologia 90: 347-356.
- HIBBETT, D. S., R. H. NILSSON, M. SNYDER, M. FONSECA, J. COSTANZO, and M. SHONFELD. 2005. Automated phylogenetic taxonomy: an example in the *Homobasidiomcetes* (mushroom-forming fungi). Syst. Biol. 54: 660-668.
- JOYCE, W. G., J. F. PARHAM, and J. A. GAUTHIER. 2004. Developing a protocol for the conversion of rank-based taxon names to phylogenetically defined clade names, as exemplified by turtles. J. Paleontol. 78: 989-1013.
- KRON, K. A. 1997. Exploring alternative systems of classification. Aliso 15: 105-112.
- LANGER, M. C. 2001. Linnaeus and the PhyloCode: where are the differences? Taxon 50: 1091-1096.
- LAPORTE, J. 2004. Natural kinds and conceptual change. Cambridge: Cambridge University Press.
- LAURIN, M. 2001. L'utilisation de la taxonomie phylogénétique en paléontologie: avatages et inconvénients. Biosystema 19 Systématique et Paléontologie: 197-211.
- LAURIN, M. 2002. Tetrapod phylogeny, amphibian origins, and the definition of the name Tetrapoda. Syst. Biol. 51: 364-369.
- LAURIN, M. 2005. The advantages of phylogenetic nomenclature over Linnean nomenclature. Pp. 67-97 *in* A. Minelli, G. Ortalli, and G. Sanga (eds), Animal Names. Venice, Italy: Instituto Veneto di Scienze, Lettere ed Arti.
- LAURIN, M., and J. S. ANDERSON. 2004. Meaning of the name *Tetrapoda* in the scientific literature: an exchange. Syst. Biol. 53: 68-80.
- LEE, M. S. Y. 1996a. The phylogenetic approach to biological taxonomy: practical aspects. Zool. Scr. 25: 187-190.
- LEE, M. S. Y. 1996b. Stability in meaning and content of taxon names: an evaluation of crown-clade definitions. Proc. R. Soc. Lond. B. Biol. Sci. 263: 1103-1109.
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- LEE, M. S. Y. 1998b. Ancestors and taxonomy. Trends Ecol. Evol. 13: 26.
- LEE, M. S. Y. 1999a. Reference taxa and phylogenetic nomenclature. Taxon 48: 31-34.
- LEE, M. S. Y. 1999b. Stability of higher taxa in phylogenetic nomenclature—some comments on Moore (1998). Zool. Scr. 28: 361-366.
- LEE, M. S. Y. 2001. On recent arguments for phylogenetic nomenclature. Taxon 50: 175-180.
- LEE, M. S. Y. 2005. Choosing reference taxa in phylogenetic nomenclature. Zool. Scripta 34: 329-331.
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- MINELLI, A. 1995. The changing paradigms of biological systematics: new challenges to the principles and practice of biological nomenclature. Bull. Zool. Nomen. 52: 303-309.
- MOORE, G. 1998. A comparison of traditional and phylogenetic nomenclature. Taxon 47: 561-579.
- PLEIJEL, F. and M. HÄRLIN. 2004. Phylogenetic nomenclature is compatible with diverse philosophical perspectives. Zool. Scripta 33: 587-591.
- PLEIJEL, F. and G. W. ROUSE. 2003. Ceci n'est pas une pipe: names, clades and phylogenetic nomenclature. J. Zool. Syst. Evol. Research 41: 162-174.
- ROWE, T., and J. GAUTHIER. 1992. Ancestry, paleontology and definition of the name *Mammalia*. Syst. Biol. 41: 372-378.
- SCHANDER, C. 1998b. Mandatory categories and impossible hierarchies a reply to Sosef. Taxon 47: 407-410.
- SCHANDER, C., and M. THOLLESSON. 1995. Phylogenetic taxonomy some comments. Zool. Scr. 24: 263-268.
- SERENO, P. C. 1998. A rationale for phylogenetic definitions, with application to the higher-level taxonomy of *Dinosauria*. N. Jb. Geol. Paläont. Abh. 210: 41-83.
- SERENO, P. C. 1999. Definitions in phylogenetic taxonomy: critique and rationale. Syst. Biol. 48: 329-351.
- SERENO, P. C. 2005. The logical basis of phylogenetic taxonomy. Syst. Biol. 54: 595-619.
- STEVENS, P. F. 2002. Why do we name organisms? Some reminders from the past. Taxon 51: 11-26.
- SUNDBERG, P., and F. PLEIJEL. 1994. Phylogenetic classification and the definition of taxon names. Zool. Scr. 23: 19-25.
- WILKINSON, M. 2006. Identifying stable reference taxa for phylogenetic nomenclature. Zool. Scr. 35: 109-112.
- WYSS, A. R., and J. MENG. 1996. Application of phylogenetic taxonomy to poorly resolved crown clades: a stem-modified node-based definition of *Rodentia*. Syst. Biol. 45: 559-568.

# Phylogenetic Nomenclature of Species (or applying specific epithets to small clades that others view as species):

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- BRANDLEY, M. C., and K. DE QUEIROZ. 2004. Phylogeny, ecomorphological evolution, and historical biogeography of the *Anolis cristatellus* series. Herpetol. Monogr. 18: 90-126.
- CANTINO, P. D. 1998. Binomials, hyphenated uninomials, and phylogenetic nomenclature. Taxon 47: 425-429.
- CANTINO, P. D., H. N. BRYANT, K. DE QUEIROZ, M. J. DONOGHUE, T. ERIKSSON, D. M. HILLIS, and M. S. Y. LEE. 1999. Species names in phylogenetic nomenclature. Syst. Biol. 48: 790-807.
- CANTINO, P. D., S. J. WAGSTAFF, and R. G. OLMSTEAD. 1999. *Caryopteris* (*Lamiaceae*) and the conflict between phylogenetic and pragmatic considerations in botanical nomenclature. Syst. Bot. 23: 369-386.

- CLARKE, J. A. 2004. The Morphology, phylogenetic taxonomy and systematics of *Ichthyornis* and *Apatornis* (*Avialae*: *Ornithurae*). Bull. Am. Mus. Nat. Hist. 286: 1-179.
- DE QUEIROZ, K., and J. GAUTHIER. 1992. Phylogenetic taxonomy. Annu. Rev. Ecol. Syst. 23: 449-480.
- DE QUEIROZ, K. 1992. Phylogenetic definitions and taxonomic philosophy. Biol. Phil. 7: 295-313.
- DE QUEIROZ, K. 1995. The definitions of species and clade names: A reply to Ghiselin. Biol. Phil. 10: 223-228.
- DAYRAT, B., C. SCHANDER and K. D. ANGIELCZYK. 2004. Suggestions for a new species nomenclature. Taxon 53: 485-591.
- DAYRAT, B. 2005. Advantages of naming species under the PhyloCode: an example of how a new species of *Discodorididae* (*Mollusca*, *Gastropoda*, *Euthyneura*, *Nudibranchia*, *Doridina*) may be named. Marine Biol. Res. 1: 216-232.
- DAYRAT, B. and T. M. GOSLINER. 2005. Species names and metaphyly: a case study in *Discodorididae* (*Mollusca*, *Gastropoda*, *Euthyneura*, *Nudibranchia*, *Doridina*). Zool. Scripta 34: 199-224.
- FISHER, K. 2006. Rank-free monography: a practical example from the moss clade *Leucophanella* (*Calymperaceae*). Syst. Bot. 31: 13-30.
- GHISELIN, M. T. 1995. Ostensive definitions of the names of species and clades. Biol. Phil. 10: 219-222.
- HILLIS, D. M., D. A. CHAMBERLAIN, T. P. WILCOX, and P. T. CHIPPINDALE. 2001. A new species of subterranean blind salamander (*Plethodontidae*: *Hemidactyliini*: *Eurycea*: *Typhlomolge*) from Austin, Texas, and a systematic revision of central Texas paedomorphic salamanders. Herpetologica 57: 266-280.
- NICHOLSON, K. E. 2002. Phylogenetic analysis and a test of the current infrageneric classification of *Norops* (beta *Anolis*). Herpetol. Monogr. 16: 93-120.
- LEE, M. S. Y. 2002. Species and phylogenetic nomenclature. Taxon 51: 507-510.
- MISHLER, B. D. 1999. Getting rid of species? Pp. 307-315 *in* R. Wilson (ed.), Species: New Interdisciplinary Essays. Cambridge, Massachusetts: M.I.T. Press.
- PLEIJEL, F. 1999. Phylogenetic taxonomy, a farewell to species, and a revision of *Heteropodarke (Hesionidae, Polychaeta, Annelida)*. Syst. Biol. 48: 755-789.
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- SPANGLER, R. E. 2003. Taxonomy of *Sarga*, *Sorghum* and *Vacoparis* (*Poaceae*: *Andropogoneae*). Australian Syst. Bot. 16: 279-299.

# Other Applications of Phylogenetic Nomenclature:

AGUINALDO, A. M., J. M. TURBEVILLE, L. S. LINFORD, M. C. RIVERA, J. R. GAREY, R. A. RAFF, and J. S. LAKE. 1997. Evidence for a clade of nematodes, arthropods, and other moulting animals. Nature 387: 489-493.

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- ARCHIBALD, J. D. 1996. Fossil evidence for a Late Cretaceous origin of "hoofed" mammals. Science 272: 1150-1153.
- BAUM, D. A., W. S. ALVERSON, and R. NYFFELER. 1998. A durian by any other name: taxonomy and nomenclature of the core *Malvales*. Harv. Pap. Bot. 3:315-330.
- BERTA, A. 1994. What is a whale? Science 263: 180-181.
- BREMER, K. 2000. Phylogenetic nomenclature and the new ordinal system of the angiosperms. Pp. 125-133 *in* B. Nordenstam, G. El-Ghazaly, and M. Kassas (eds.), Plant Systematics for the 21<sup>st</sup> Century. London: Portland Press.
- BROCHU, C. A. 1997. Synonymy, redundancy, and the name of the crocodile stemgroup. J. Vertebrate Paleontology 17: 448-449.
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- BROCHU, C. A. 2003. Phylogenetic approaches toward crocodylian history. Annu. Rev. Earth Planet Sci. 31: 357-397.
- BRYANT, J. D., and M. C. MCKENNA. 1995. Cranial anatomy and phylogenetic position of *Tsaganomys altaicus* (*Mammalia: Rodentia*) from the Hsanda Gol Formation (Oligocene), Mongolia. Am. Mus. Novit. 3156: 1-42.
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- CHIAPPE, L. M., J. SHU'AN, J. QIANG, and M. NORELL. 1999. Anatomy and systematics of the *Confuciusornithidae* (*Theropoda: Aves*) from the Late Mesozoic of northeastern China. Bull. Am. Mus. Nat. Hist. 242: 1-89.
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- (ITS), and implications for the classification of *Rosoideae* (*Rosaceae*). Plant Syst. Evol. 211: 155-179.
- ESTES, R., K. DE QUEIROZ, and J. GAUTHIER. 1988. Phylogenetic relationships within *Squamata*. Pp. 119-281 *in* R. Estes and G. K. Pregill (eds.), Phylogenetic Relationships of the Lizard Families: Essays Commemorating Charles L. Camp. Stanford, Calif.: Stanford Univ. Press.
- FORD, L. S., and D. C. CANNATELLA. 1993 The major clades of frogs. Herpetol. Monogr. 7: 94-117.
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