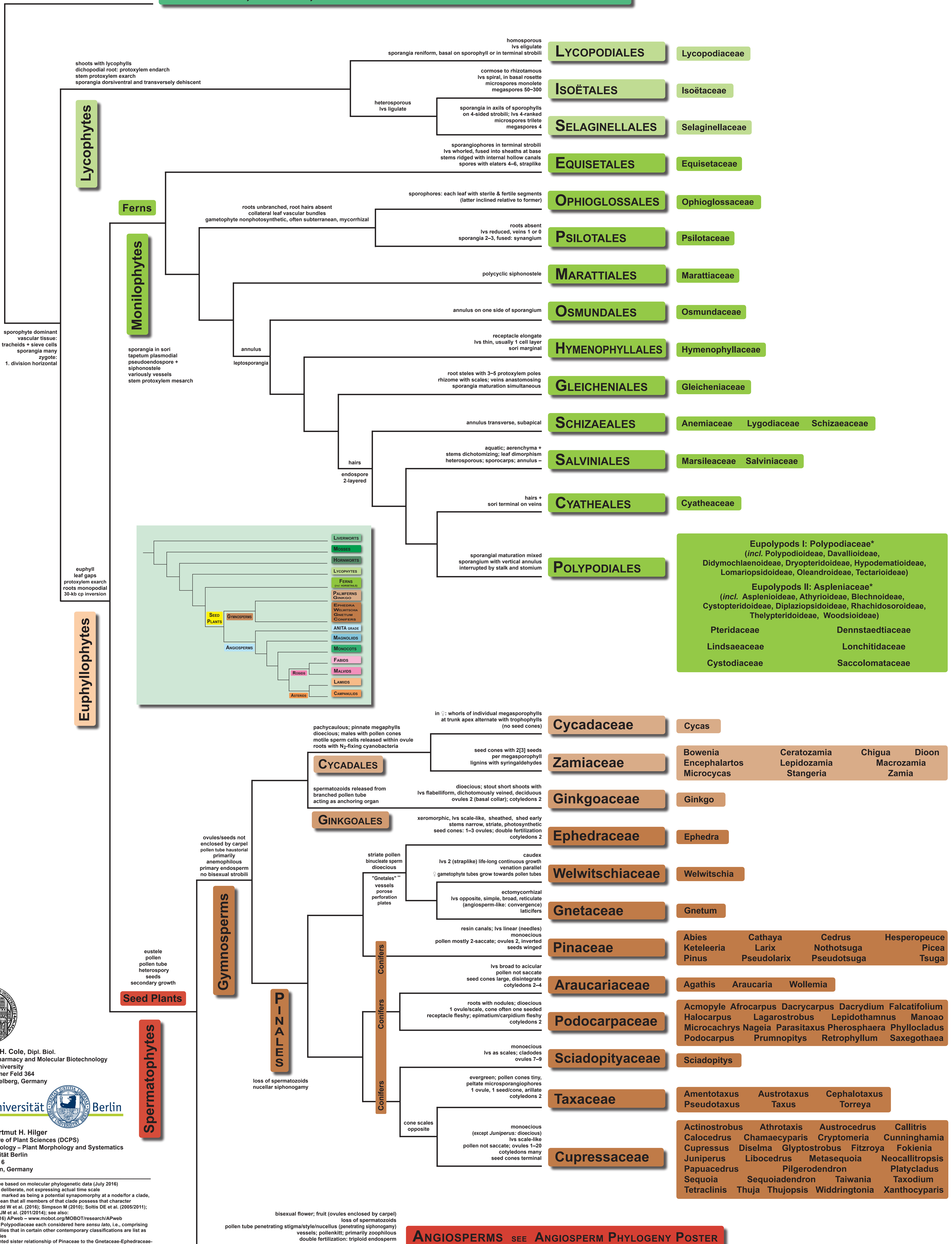


TRACHEOPHYTE PHYLOGENY

Vascular Plants – Systematics and Characteristics

HORNWORTS, MOSSES, LIVERWORTS SEE "BRYOPHYTE" PHYLOGENY POSTER



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* hypothetical tree based on molecular phylogenetic data (July 2016)
* branch lengths deliberate, not expressing actual time scale
* if a character is marked as being a potential synapomorphy at a node/for a clade, this does not mean that all members of that clade possess that character
* References: Judd W et al. (2016); Simpson M (2010); Soltis DE et al. (2005/2011); Christenhusz MJM et al. (2011/2014); see also: Stevens PF (2016) APweb – www.mobot.org/MOBOT/research/APweb
* Atriacae and Polyodiaceae each considered here *sensu lato*, i.e., comprising several subfamilies that in certain other contemporary classifications are listed as individual families
** the here presented sister relationship of Pinaceae to the Gnetaceae-Ephedraceae-Welwitschiaceae clade ("Gnetine"), remaining controversial to date, places the latter within Pinales and thus Gnetales would not represent a separate order