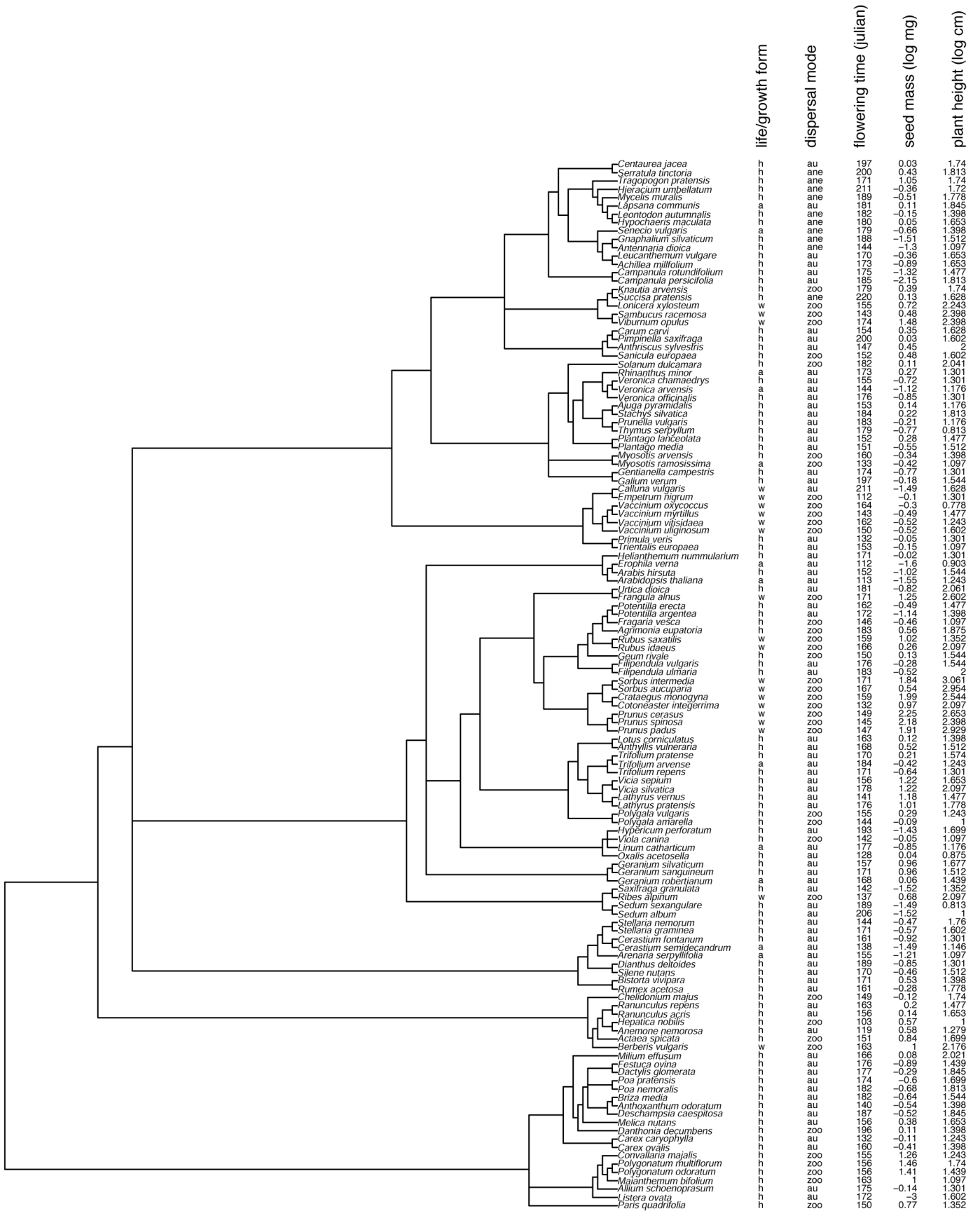


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## Appendix 1

Fig. A1. Phylogenetic hypothesis used in the independent contrast and GEE analyses. Life/Growth form (w=woody perennials, h=perennial herbs, a=annual herbs), dispersal mode (ane=anemochory, au=autochory, zoo=zoochory), flowering onset day, seed mass, and plant height are indicated to the right of each terminal taxon. Seed mass (mg) data was compiled from recent studies performed in the same provinces as the phenology study (Eriksson and Ehrlén 1991, Eriksson and Eriksson 1997, Fröberg and Eriksson 1997, Kiviniemi and Eriksson 1999, Fröberg 2001, Kiviniemi 2001, Jakobsson and Eriksson 2003), while plant height (cm), dispersal mode, and growth/life form were found in Mossberg and Stenberg (2003). The 'backbone' of the supertree was generated using Phylomatic (Webb and Donoghue 2005), and the phylogenetic hypothesis generated by Phylomatic was checked against the APG II hypothesis (Bremer et al. 2003) and the Angiosperm Phylogeny Website (Stevens 2001 onwards). Increased resolution at lower level nodes was accomplished by grafting phylogenetic hypotheses from more focused studies published as of 20 February 2007 (Asteraceae (Funk et al. 2005, B. Gemeinholzer unpubl. and M. Englund, Dept of Botany, Stockholm, pers.comm); Dipsacales (Bell and Donoghue 2005); Apiaceae (Downie et al. 2000); *Veronica* (Taskova et al. 2004); Lamiaceae (Wink 2003); Ericales/Ericaceae (Kron et al. 2002, Schönenberger et al. 2005); Rosaceae (Eriksson et al. 2003, Potter et al. 2002); *Prunus* (Shaw and Small 2004, Bortiri et al. 2006); Fabaceae (Wojciechowski et al. 2004); *Trifolium* (Ellison et al. 2006); *Geranium* (Zoubir 2006); Saxifragales (Fishbein and Soltis 2004); Caprifoliales (Cuénoud et al. 2002); Caprifoliaceae (Fior et al. 2006); Ranunculaceae (Johansson 1995); Poaceae (Barker et al. 2001, Catalán et al. 1997, 2004)).

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