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OEB53: Term paper abstract

In many deciduous tree species, spring flowering proceeds leaf development (proteranthy), while in others, it is leaf expansion that occurs first (seranthy). It has been suggested that these floral-foliate phenological patterns may, in and of themselves, be adaptive. The dominant hypothesis in the literature is that proteranthy increases pollination efficiency for wind-pollinated taxa, though empirical evidence for this hypothesis is sparse. In part one of this paper, I review the support for this hypothesis and present several alternative hypothesizes. In part two, I will discuss the physiological and evolutionary constraints that may dictate floral-foliate phenological sequences in general, and in an era of global climate change.