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Title: The Miliuseae revisited: phylogenetic, taxonomic, and palynological studies in a

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STELLINGEN

behorende bij het proefschrift:

The Miliuseae revisited:

phylogenetic, taxonomic, and palynological studies in a major clade of Annonaceae van Tanawat Chaowasku

- 1. The red and small single-seeded monocarps of *Hubera* (Chapter 3) indicate that birds are the most likely dispersers (Chapter 2), presumably explaining the wide distribution of this genus.
- 2. The more or less transparent window-like structures at the inner petal base of certain species of *Miliusa* (Chapter 7) indicate that flies are the most likely pollinators (Chaowasku *et al.* 2013a).
- 3. Although most genera in Miliuseae are relatively easily identifiable using only floral characters, e.g. *Miliusa* (Chapter 7), *Neo-uvaria* (Chapter 9), and *Winitia* (Chapter 4), certain genera, especially those formerly included in the polyphyletic *Polyalthia* complex, need a combination of characters (flowers, fruits/seeds, pollen, leaves) for identification, e.g. *Hubera* (Chapter 3).
- 4. Plastid markers are of limited utility for unravelling intertribal and intergeneric relationships of Miliuseae due to the low percentage of potentially informative characters (PICs) (Chapter 2); molecular markers with higher percentage of PICs, e.g. from the nuclear genome, should be developed.
- 5. Observations of both SEM and TEM of the same species of Annonaceae maximize the correctness in pollen morphological interpretation because, for example, only TEM can verify the presence of aperture(s) in any pollen exhibiting (a) long furrow(s) (under SEM).
- 6. The subfamilial and tribal delimitations of Annonaceae are mostly arbitrary and not satisfactory because of the lack of obvious synapomorphies or the lack of resolution of phylogenetic trees (Chatrou *et al.* 2012).
- 7. Herbaria still house a huge number of undiscovered species (Bebber *et al.* 2010), hence specimens in herbaria should always be accessible to taxonomists.
- 8. Collaboration of 10 ASEAN nations in the study of tropical systematics and biodiversity will greatly facilitate documentation of life on Earth, and is one of the ways to strengthen the ASEAN Economic Community (AEC), which will be operational by 2015.
- 9. Time is a very important factor in a PhD study, but gaining knowledge and experiences is more important than finishing PhD studies in minimum time.
- 10. You will learn nothing from those who agree with you, but learn a lot from those who disagree.

[Bebber et al. 2010 = Bebber DP et al. 2010. Herbaria are a major frontier for species discovery. PNAS 107: 22169–22171.]