



Fig. S2b

Fig. S2a



Fig. S2c

Fig. S2b



Figure S2. A selected optimal tree from the phylogenetic analysis showing jackknife values (10.000 replicates) and branches that are collapsed in the strict consensus tree (broken lines). Annual species are marked with a dot. The photosynthetic pathway is optimized on the tree (C₃ green, C₄ red, C₃-C₄ intermediate yellow). The optimization is only suggestive on numbers of C₄ origins as variations in the details of the C₄ photosynthesis within and among clades suggest a more complicated evolution of C₄ photosynthesis (Christin et al. 2012a,b). The estimated numbers of species in each genus are shown to illustrate undersampling of several clades. Clades marked with asterisks denote groups that were retained in the working phylogeny used in the PGLS regression (Table I-2).