

Figure S1 Schematic diagram of flow cytometric histogram of DAPI-stained nuclei of six type of ploidy levels (2x, 3x, 4x, 6x, and 8x) of the *A. chinensis* complex analyzed simultaneously with the internal standard *Actinidia chinensis* cv. 'Hongyang'.

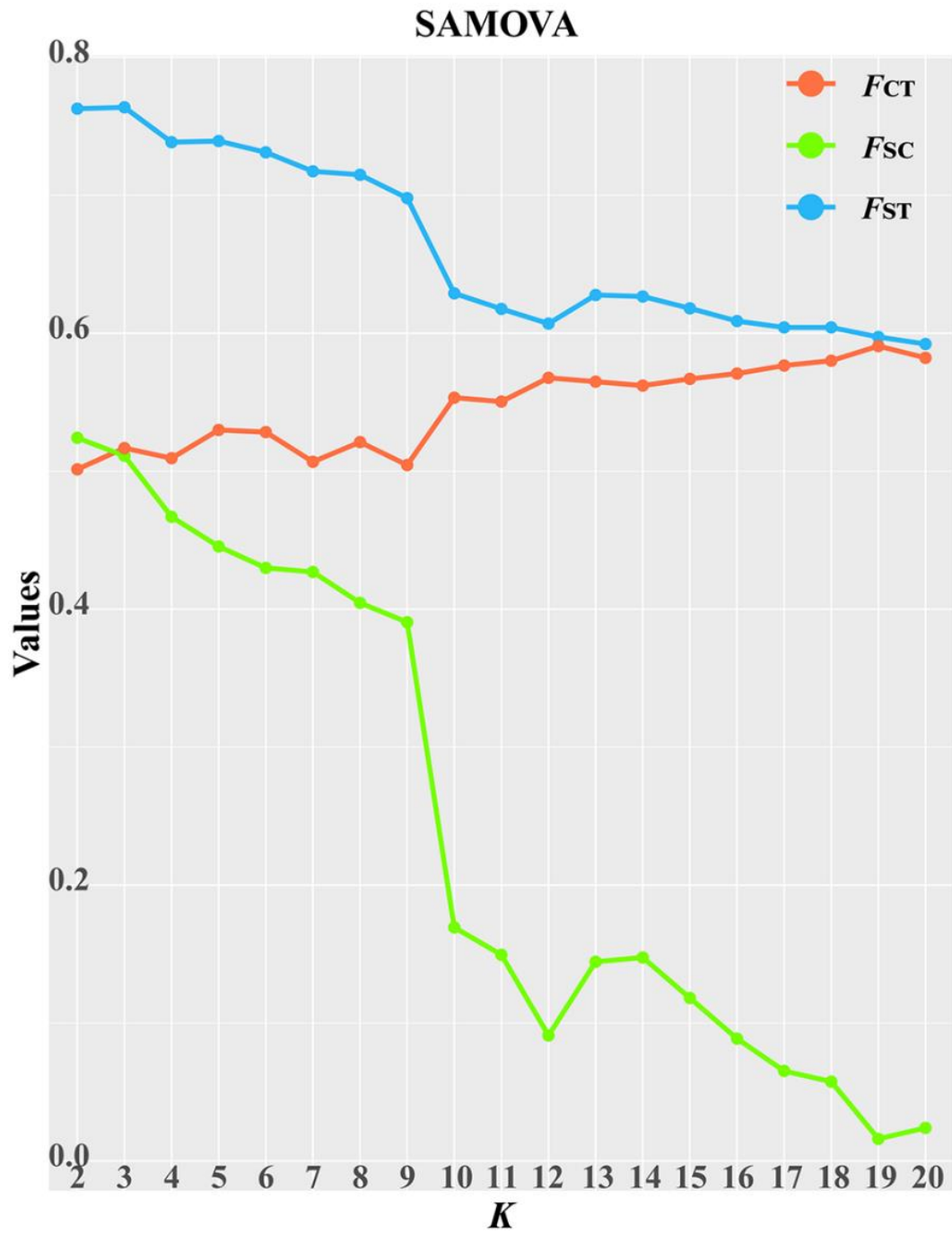


Figure S2 Results of spatial analysis of molecular variance analysis (SAMOVA, $K = 2-20$) on the *A. chinensis* complex populations in subtropical China. K refers to the number of predefined groups used in the analyses.

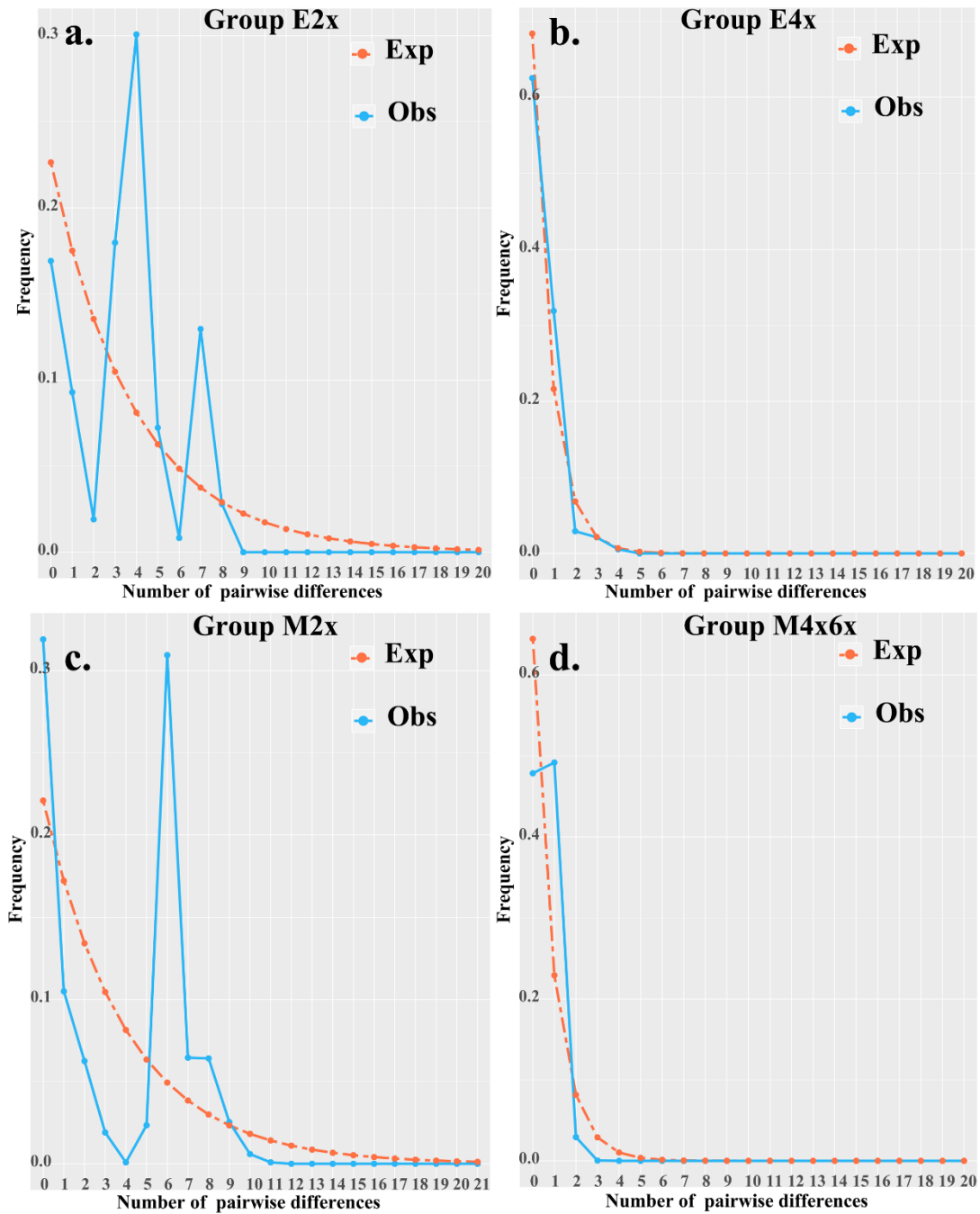


Figure S3 Observed and expected mismatch distributions for different groups of the *A. chinensis* complex. (a) group E2x; (b) group E4x; (c) group M2x; (d) group M4x6x. The solid line indicates observed distribution; The dashed line represents theoretically expected distribution under a population expansion model.

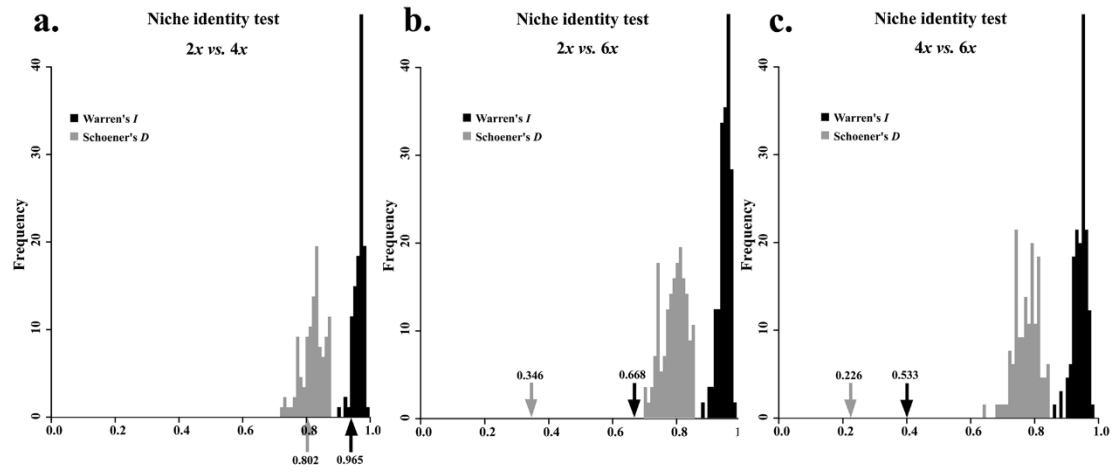


Figure S4 The results of niche-identity tests by comparing the niches of three main ploidy level populations. (a) 2x vs. 4x (b) 2x vs. 6x (c) 4x vs. 6x