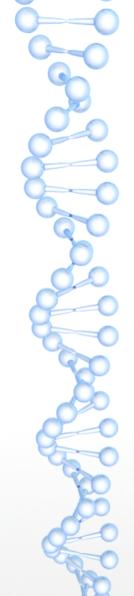


Factors that Contribute to Variation in Evolutionary Rate among *Arabidopsis Yang and Gaut 2011*



Duplication Events

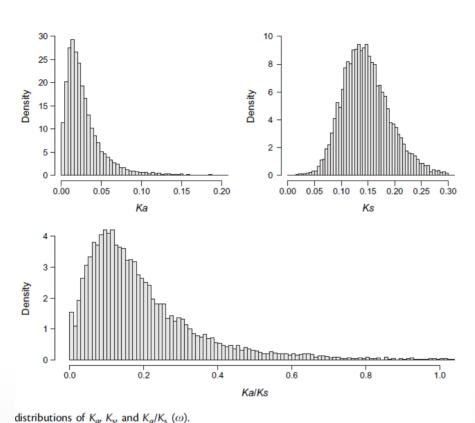
Triploid (3N)

Tetraploid (4N)

Diploid (2N)

Haploid (N)

- WGD: Whole Genome Duplication Events
 - Poly-ploidy events
 - Biased for Signal Transducers and Transcription Factors
- Non-WGD: Non-Whole Genome Duplication
 - Single Gene (and Tandum) duplication
 - Biased for Membranous Proteins and Stress Response



- Ka: Non-synonymous substitution rate
 - Ser → His
- Ks: Synonymous substitution rate
 - Ser → Ser
- Ka/Ks: Ratio of substitution

