

Supplementary Material to “Bringing to light the molecular evolution of *GUX* genes in plants”

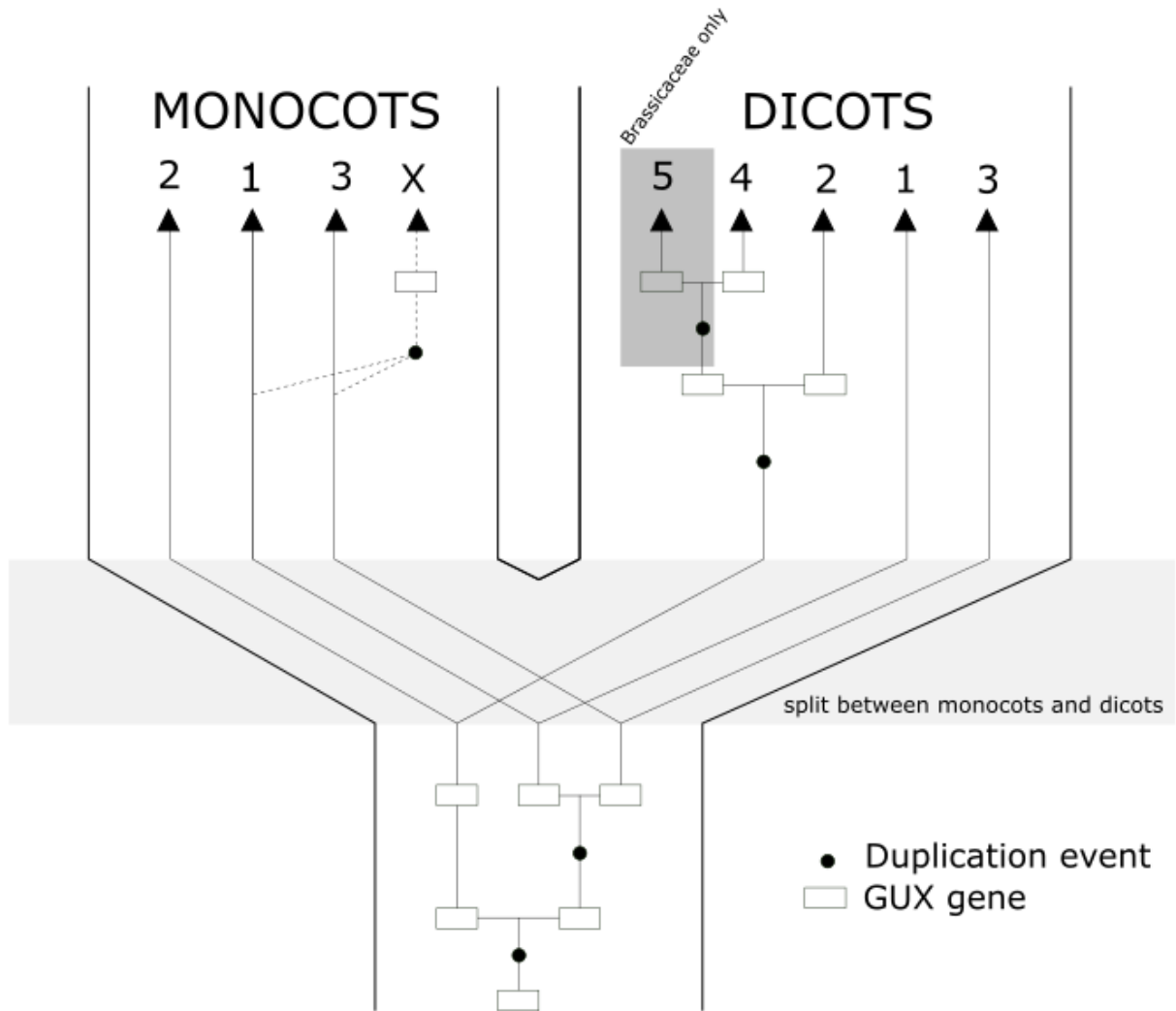


Figure S5 - A hypothesis of the evolutionary history of *GUX* genes. According to this scheme, the *GUX2* gene was originated from an event of duplication on a *GUX* ancestral gene, while *GUX1* and *GUX3* were originated from the other copy originated from this duplication event, which occurred before the split between monocots and dicots. In monocots, the *GUX*'X' was originated after the divergence between monocots and dicots. Likewise, in dicots, *GUX4* was the result of a duplication of *GUX2*. *GUX 4* still has undergone a new duplication, originating the clade of *GUX5* exclusive of Brassicaceae family. All three genes originated prior to the event of divergence between monocots and dicots remain until the present day in both groups.