Table S1. List of strand-specific RNA-seq datasets of *Glycine soja* [1] used for transcriptome assembly and *MATE* antisense transcript identification.

BioProject/SRA Accession	Soybean germplasm	Tissue type	Condition
SRP158454 [2]	W05	Embryo, cotyledon and hypocotyl, root, apical bud, stem, flower, 7-day pod, 14-day pod, 14-day seed, 40-day pod, 40-day seed	Normal
		Nodule, root	Roots were treated with *Sinorhizobium fredii* CCBAU 25509 or *Sinorhizobium fredii* CCBAU 45436 to form nodules
PRJNA281671 [3]	C1, C3, C4, C5, C6, C7, C8, C9, Y1, Y2, Y3, Y4, Y5, Y6, Y7, Y8, Y9, Y10	Seed	Normal
PRJNA369483 [4]	ys1, ys16, ys17, ys23, ys26, ys29, ys34	Seed	Normal
PRJNA336336 [5]	PI407179, PI424007, PI424123, PI507656	Leaf	Ozone

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