Additional file 1: Table S1. Gene numbers of *SOD* gene family in 18 plant genomes.

Gene group	Plant speicies																
	Algae	Moss	Amborellaceae	Monocots								Edudicots					
	Cr	Pp	Amt[1,2]	Bd[1-3]	Hv[1-3]	Os[1-3]	Sb[1-3]	Si[1-3]	Zm[1-4]	Ta[1-5]	Ma[1-4,6]	At[1,2,7,8]	Ga[1,2,7,9]	Gr[1,2,7,9]	**Gh**[1,2,7,9,10]	Pt[1,2,7,11]	Gm[1,2,12,13]
Cu/Zn-SOD	0	3	3	3	3	4	4	4	5	10	6	3	5	5	**10**	6	6
Mn-SOD	5	1	1	1	1	1	1	1	2	2	4	2	2	2	**4**	2	2
Fe-SOD	1	2	2	2	2	2	2	2	3	6	2	3	2	2	**4**	3	5
Total	**6**	**6**	**6**	**6**	**6**	**7**	**7**	**7**	**10**	**18**	**12**	**8**	**9**	**9**	**18**	**11**	**13**

Cr, *Chlamydomonas reinhardtii* ; **Pp**, *Physcomitrella patens* ; **Amt**, *Amborella trichopoda* ; **Bd**, *Brachypodium distachyon* ; **Hv**, *Hordeum vulgare* ; **Os**, *Oryza sativa* ; **Sb**, *Sorghum bicolor* ; **Si**, *Setaria italica* ; **Zm**, *Zea mays* ; **Ma**, *Musa acuminata* ; **Ta**, *Triticum aestivum* ; **At**, *Arabidopsis thaliana* ; **Ga**, *Gossypium arboretum* ; **Gr**, *Gossypium raimondii* ; **Pt**, *Populus trichocarpa* ; **Gm**, *Glycine max* ; **WGD**, whole-genome duplication; **Mya**, million years ago.

[1], ancestral seed plant WGD (ζ) ~310 Mya; **[2]**, the paleohexaploidization event (ε) common to all eudicots 130-190 Mya; **[3]**, two WGD in monocots (σ and ρ) inferred to have pre-dated the diversification of Poaceae; **[4]**, allotetraploid in maize ~13 Mya; **[5]**, one lineage-specific polyploid event (hexaploid) in bread wheat; **[6]**, three lineage-specific WGD rounds occurred during banana evolution; **[7]**, one whole genome triplication (WGT) event (γ) probably shared by all core eudicots; **[8]**, two recent WGDs (α and β) within the crucifer lineage; **[9]**, one penta- or hexaploid duplication event in the *Gossypium* lineage after splitting from cacao lineage ~60 Mya; **[10]**, neoallopolyploids reuniting divergent *Gossypium* genomes 1-2 Mya; **[11]**, one lineage-specific WGD event occurred during poplar evolution; **[12]**, the legume-specific WGD event 58 Mya; **[13]**, the *Glycine* WGD event 13 Mya.