

Appendix D Function cluster of differentially expressed genes in aphid resistant alfalfa cultivar Zhongmu 1 exposed (R+Aphids) and unexposed (R-Aphids) to aphid infestation and aphid susceptible cultivar SOCA exposed to aphids (S + aphids) or unexposed (S-Aphids) to aphid infestation.

	R+Aphids	R-Aphids	S-Aphids	S+Aphids	Description	Gene Nos.
I	up	down	down	up	Genes up-regulation after aphids infestation	133
II	down	up	down	up	Genes up-regulation in sensitive cultivar, while genes down-regulation in resistant cultivar after aphids infestation	13
III	-	-	down	up	Genes up-regulation in sensitive cultivar after aphids infestation	17
IV	down	up	up	down	Genes down-regulation both in sensitive and resistant cultivars after aphids infestation	42
V	up	down	up	down	Genes down-regulation in sensitive cultivar, while genes up-regulation in resistant cultivar after aphids infestation	22
VI	up	up	down	down	Genes down-regulation in sensitive cultivar, while genes up-regulation in resistant cultivar both in aphids infestation and control	8

