

**Supplementary Table S1. Primers and probes used in this work:**

gene	gene designation in cv.Sang genome	primer/probe name	sequence
Tubulin- $\alpha$	AVESA.00010b.r2.7CG0700360.1	Tub-a forward Tub-a reverse Tub-a probe	GAG GTG GAA CTG GCT CTG GAC ACT GTT GTA TGG CTC AAC /5HEX/TCA CCT CAG /ZEN/GTC TCC ACC TCT GTT /3IABkFQ/
AsUGT1	AVESA.00010b.r2.6AG1068650.1	AsUGT1 forward AsUGT1 reverse AsUGT1 probe	GTG GAT GGA ACT CAA CAT TGG AG GGT CAG CCC AAT CTG GAA TAC /56-FAM/CCG TTG CTA /ZEN/GCG GTG TAC CTC TTG /3IABkFQ/
AsUGT2	AVESA.00010b.r2.6AG1068570.1	AsUGT2 forward AsUGT2 reverse AsUGT probe	GAC CAA CCC ACC ATC TCA AA CCC ATT CAT CAC CTC TCT AAT ACA A /56-FAM/TTT CTC TCT /ZEN/TCC GCA CTC GCA CAC /3IABkFQ/
PR1	AVESA.00010b.r2.7AG1201740.1 AVESA.00010b.r2.UnG1401040.1	PR1 forward PR1 reverse PR1 probe	TGC AAG CTC CAG CAC TC GCT GTT GGA CCC ATA GTT GTA /56-FAM/AAC CTGT GGG /ZEN/TCA GCG AGA AGA AT/3IABkFQ/
PR3	AVESA.00010b.r2.1DG0178620 AVESA.00010b.r2.1AG0060060	PR3 forward PR3 reverse PR3 probe	GGC TAC TGC TTC AAG GAA GA CCA GCT GGT AGT TGG ACT G /56-FAM/ACC AAG GAC /ZEN/GTG GAC CAA TCC AAT/3IABkFQ/
PR4	AVESA.00010b.r2.4AG0575210 AVESA.00010b.r2.4DG0719670	PR4 forward PR4 reverse PR4 probe	ACT GGA CAC CGT CTT CT CAG TCG ACG AAC TTG TAG TTG A /56-FAM/CAA GAT CGA /ZEN/CAC CAA CGG ACA GGG/3IABkFQ/
PR5	AVESA.00010b.r2.5DG0992430.1 AVESA.00010b.r2.5AG0816180.1	PR5 forward PR5 reverse PR5 probe	CGA ACT ACT CCC AGT TCT TCA A CAGAGCACGATCTGGTAGTTT /56-FAM/ACG ACC AGA /ZEN/CAA GCA CAT TCA CCT/3IABkFQ/
WRKY23-like	AVESA.00010b.r2.7DG1345990.1 AVESA.00010b.r2.2AG0259040.1 AVESA.00010b.r2.6CG1146320.1	WRKY23 forward WRKY23 reverse WRKY23 probe	CAG AAG GTG ACC AAG GAC AA CGC TGC ACC TTC TTC TTC A /56-FAM/TAC TTC CGG /ZEN/TGC TCC TTC GC/3IABkFQ/
WRKY70-like	AVESA.00010b.r2.1DG0191960.1 AVESA.00010b.r2.1AG0073190.1 AVESA.00010b.r2.1CG0105620.1	WRKY70 forward WRKY70 reverse WRKY70probe	CGG CGG GAA GAG AAA GTC GTC GTC CAA GCT CTT CAA GT /56-FAM/AGA AAG ACC/ZEN/ CAG CAA TCG TCC GTT/3IABkFQ/