

TABLE S1 Primers used in this study

Purposes	Name of primers	Nucleotide sequences
cDNA sequencing of bvORF18/19/20/21	D-Fw	5'-TGCACCCAGTAGTTGTGCCA-3'
	D-Rv	5'-GCAAGAGAGGATGCCTTAAG-3'
	Gre	5'-GATGCGCGATAATTGTAGCC-3'
Generating hybridization probe of bvORF19 3' UTR	3'-FW	5'-AGCTTGCAAAGCCACTGGGCGA-3'
	3'-RV	5'-GGAACCAAATTAGATTGAATTAACAAGTGG-3'
bvORF16-GFP construction	GFP-ORF16-FW	5'-CCGTGACATGAAATGGAGCTGCGTTG-3'
	GFP-ORF16-RV	5'-GGCCATGGCAGATAGTTCTTTTCCAATTGG-3'
bvORF20-GFP construction	GFP-ORF20-FW	5'-GGGTCGACATGGCATGGTACAGTAAATTC-3'
	GFP-ORF20-RV	5'-GGCCATGGATTTTGCAGACCCAAATAACCC-3'
Amplification of bvORF19 for transgene construction	attB1-ORF19 prom	5'-AAAAGCAGGCTTTAGATCTGCCGTTGCACAACG-3'
	orf19-genomic 3' rv	5'-AGAAAGCTGGGTGTATCTGGGACCTGGATTGAG-3'
Amplification of bvORF20 for transgene construction	attB1-ORF20 prom	5'-AAAAGCAGGCTGTAACAGAGGGTTCAAATTGCGG-3'
	orf20-genomic3'rv	5'-AGAAAGCTGGGTGGTCCTGGATTGAGGGTTAAC-3'
Amplification of bvORF21 for transgene construction	attB1-ORF21 prom	5'-AAAAGCAGGCTGAACCTGAACTGAACTTATTGG-3'
	orf21-genomic3'rv	5'-AGAAAGCTGGGTTACCTGGGTCCCTGGATTAAG-3'
Detection of bialaphos-resistance gene	BAR5	5'-CGAGACAAGCACGGTCAACTTC-3'
	BAR6	5'-AAACCCACGTCATGCCAGTTC-3'