Supplementary Materials

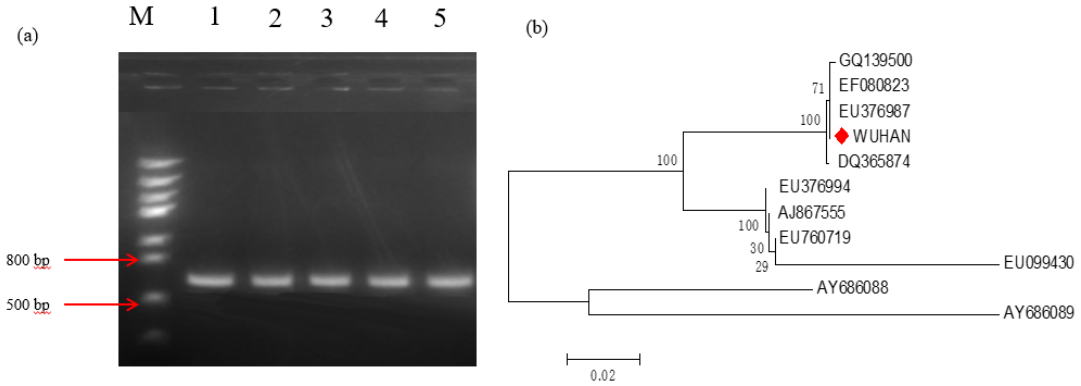

Fig. S1 Biotype identification of the *Bemisia tabaci*. (a) PCR reaction. M, 5 kb molecular weight marker; labeled 1, 2 and 3 are from greenhouse experiments and labeled 4 and 5 are field experiments; (b) gene sequences of geographically representative populations domestic (Wuhan) and foreign (sequence accession numbers given) whiteflies.

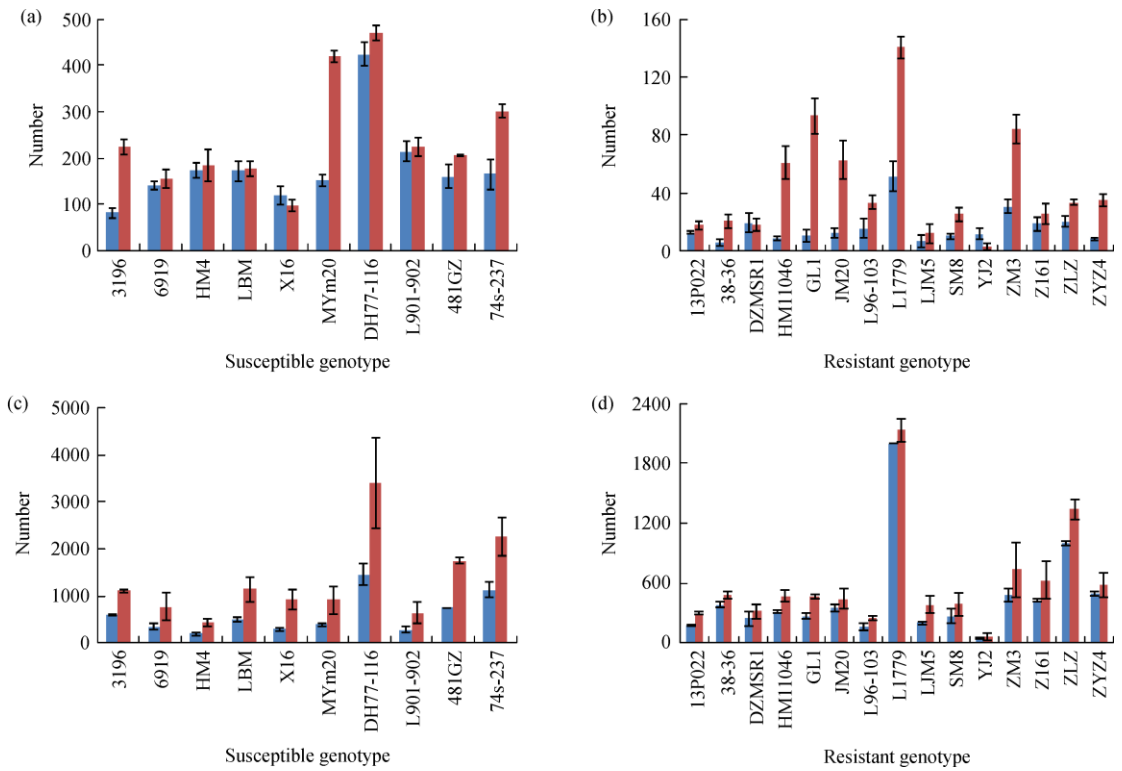

Fig. S2 Mean (n = 3) number of whitefly adults after 1 week of infestation and densities of nymphs after 3 weeks of infestation in greenhouse Exp. 2 (a, b) and Exp. 3 (c, d)

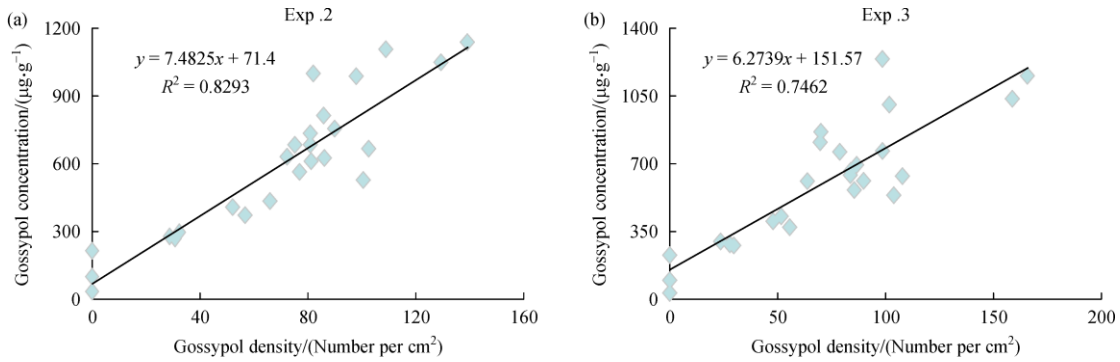

Fig. S3 Gossypol concentrations were positively correlated to gland density in greenhouse Exp. 2 (a) and Exp. 3 (b)

Table S1 Mean whitefly eggs and nymphs density in two greenhouse experiments

Phenotype	Genotype	Eggs and nymphs per cm^2					
		Exp. 2		Exp. 3		Mean	
Susceptible	DH77-116	1450.571	a	3359.227	a	2404.899	a
	74s-237	1125.217	b	2238.910	b	1682.064	b
	481GZ	743.625	c	1744.460	bc	1244.042	c
	3196	604.633	cd	1100.230	c	852.432	d
	LBM	483.101	d	1125.192	c	804.146	de
	MYm20	386.769	de	895.450	cd	641.110	de
	6919	340.223	de	750.662	cd	545.442	de
	X16	287.342	e	903.876	cd	595.609	de
	L901-902	268.636	e	625.774	cd	447.205	e
	HM4	199.119	e	427.640	d	313.379	e
	LSD 5%						
Resistant	13P022	181.617	g	413.513	e	297.565	f
	38-36	382.982	de	568.100	de	475.541	e
	DZMSR1	238.930	fg	384.182	e	311.556	f
	HM11046	309.168	ef	627.977	d	468.572	e
	GL1	264.985	f	654.829	d	459.907	e
	JM20	352.104	e	523.669	de	437.887	e
	L96-103	156.825	g	330.531	e	243.678	f
	L1779	2000.000	a	2268.623	a	2134.312	a
	LJM5	198.007	g	562.568	de	380.287	ef
	SM8	259.016	f	508.382	de	383.699	ef
	YJ2	44.244	h	74.260	f	59.252	g
	ZM3	474.051	cd	984.094	c	729.072	c
	Z161	422.398	d	826.005	cd	624.201	d
	ZLZ	998.955	b	1684.261	b	1341.608	b
	ZYZ4	487.365	c	669.700	d	578.533	de
	LSD 5%						

Note: Mean whitefly eggs and nymphs density on susceptible and resistant genotypes in the greenhouse Exps. 2–3. Back transformed means in each column followed by the same letter are not significantly different using LSD ($P < 0.05$) on ANOVA of square root transformed data.

Table S2 Gossypol concentrations in selected glabrous genotypes in two greenhouse experiments

Phenotype	Genotype	Gossypol concentration/(μg·g^{-1})					
		Exp. 2		Exp. 3		Mean	
Susceptible	3196	370.6	c	371.7	cd	371.2	c
	6919	628.6	b	642.5	b	635.6	b
	HM4	680.8	b	663.4	b	672.1	b
	LBM	296.3	cd	301	cd	298.7	cd
	X16	101.9	e	99.1	e	100.5	e
	MYm20	33.4	e	35.3	e	34.4	e
	DH77-116	982.4	a	1000.7	a	991.6	a
	L901-902	215.5	d	231.8	d	223.7	d
	481GZ	753.3	b	761.4	b	757.4	b
	74s-237	434.8	c	428.3	c	431.6	c
	LSD 5%						
Resistant	13P022	1133.2	a	1154.4	a	1143.8	a
	38-36	406.6	e	403.1	de	404.9	e
	DZMSR1	527.2	d	538.9	cd	533.1	de
	HM11046	564.5	d	564.9	cd	564.7	d
	GL1	665.3	c	637.9	c	651.6	c
	JM20	680.1	c	690.6	c	685.4	bc
	L96-103	276.2	f	280.8	e	278.5	f
	L1779	610.9	cd	608	c	609.5	cd
	LJM5	1103.1	a	1241.8	a	1172.5	a
	SM8	730.1	bc	763.8	bc	747	bc
	YJ2	999.8	ab	864.6	b	932.2	ab
	ZM3	811.6	b	809	b	810.3	b
	Z161	1047.2	a	1033	a	1040.1	a
	ZLZ	270.3	f	278.5	e	274.4	f
	ZYZ4	623.8	cd	610.7	c	617.3	cd
	LSD 5%						

Note: Gossypol concentration of selected glabrous genotypes in greenhouse Exps. 2–3. Back transformed means in each column followed by the same letter are not significantly different using LSD ($P < 0.05$) on ANOVA of square root transformed data.

Table S3 Gossypol concentration, gland density and whiteflies per five leaves for selected glabrous genotypes in tow greenhouse experiments

Environment	Genotype	Adults per five leaves		Gland density per cm^2		Gossypol concentration/($\mu g \cdot g^{-1}$)	
Exp. 2	HM4	185	b	75.3	b	680.8	c
	MYm20	415.7	a	0		33.4	e
	L901-902	223.7	b	0		215.5	d
	13P022	17.7	c	139.3	a	1133.2	a
	LJM5	12	c	109	ab	1103.1	ab
	YJ2	3	c	82.3	b	999.8	b
	Z161	25.3	c	129.3	a	1047.2	ab
	LSD 5%						
Exp. 3	HM4	174	b	84	b	663.4	b
	MYm20	288.3	a	0		35.3	c
	L901-902	214.3	a	0		231.8	c
	13P022	12.7	c	166	a	1154.4	a
	LJM5	7	c	99	b	1241.8	a
	YJ2	11.7	c	70.3	b	864.6	b
	Z161	18.7	c	159	a	1033	ab
	LSD 5%						

Note: Gossypol concentration, gland density and whiteflies per five leaves for selected glabrous genotypes in greenhouse Exps. 2–3; Back transformed means in each column followed by the same letter are not significantly different using LSD ($P < 0.05$) on ANOVA of square root transformed data.

Table S4 Leaf hair density, leaf hair length and whitefly nymph density of selected genotypes with low concentrations of gossypol in two greenhouse

Enviroenment	Genotype	Nymphs per cm^2		Leaf hair per cm^2		Leaf hair length/μm	
Exp. 2	3196	604.7	b	324.2	b	35	a
	LBM	484	c	1082.9	a	34	a
	X16	287.7	e	216.7	b	28	a
	MYm20	387.3	d	0		0	
	L901-902	271.7	e	0		0	
	L96-103	158	f	0		0	
	ZLZ	999	a	1485.8	a	40	a
	LSD 5%						
Exp. 3	3196	1106	b	67	b	60	a
	LBM	1136	b	368.9	a	57	a
	X16	912.2	bc	53.7	b	43	a
	MYm20	909.8	bc	0		0	
	L901-902	638.1	c	0		0	
	L96-103	330.7	c	0		0	
	ZLZ	1685	a	474.1	a	58	a
	LSD 5%						

Note: Leaf hair density, leaf hair length and whitefly nymph density of selected genotypes with low concentrations of gossypol in the greenhouse Exps. 2–3. Back transformed means in each column followed by the same letter are not significantly different using LSD ($P < 0.05$) on ANOVA of square root transformed data.