

Supporting Table S3: p-values of neutrality tests in the domesticated sample for each simulated demographic scenario. Those scenarios rejected according to their likelihood scores are in *italics*.

				p-value for Tajima's D (in %)									p-value for Fu & Li's F* (in %)						p-value for Fu's Fs (in %)								
				PgTb1 upstream			PgTb1 mRNA			PgTb1 downstream			STS 713	STS 738	STS 476	PgTb1 upstream			PgTb1 mRNA			PgTb1 downstream			STS 713	STS 738	STS 476
				PgTb1 upstream	PgTb1 mRNA	PgTb1 downstream	STS 713	STS 738	STS 476	PgTb1 upstream	PgTb1 mRNA	PgTb1 downstream	STS 713	STS 738	STS 476	PgTb1 upstream	PgTb1 mRNA	PgTb1 downstream	STS 713	STS 738	STS 476	PgTb1 upstream	PgTb1 mRNA	PgTb1 downstream	STS 713	STS 738	STS 476
Weak expansion (N0/N2 = 1)	Intense bottleneck (N1/N2 = 5e-4)	Long bottleneck (500y)	u weak	Model 1	0.11	0.15	< 0.01	5.3	51.8	51.3	0.39	0.06	< 0.01	5.1	29.3	44.8	0.24	0.04	< 0.01	3.08	34.00	7.40					
			u average	Model 2	0.08	0.12	0.03	5.2	51.7	49.1	0.35	0.07	0.01	5.2	28.2	41.1	0.20	0.02	< 0.01	2.84	33.02	6.14					
			u strong	Model 3	0.14	0.07	< 0.01	4.4	48.3	33.3	0.34	0.06	0.01	4.3	24.7	22.3	0.02	< 0.01	< 0.01	0.91	23.45	0.87					
		Short bottleneck (100y)	u weak	Model 4	0.06	0.11	0.01	5.6	51.4	51.6	0.29	0.07	< 0.01	5.4	28.3	44.7	0.22	0.05	< 0.01	3.17	34.07	7.54					
			u average	Model 5	0.12	0.12	< 0.01	5.5	51.2	50.8	0.35	0.11	0.01	5.4	28.7	43.8	0.11	0.01	< 0.01	3.00	33.15	7.12					
			u strong	Model 6	0.09	0.05	< 0.01	5.2	50.8	47.4	0.25	0.06	< 0.01	5.3	27.9	38.4	0.16	0.05	< 0.01	2.42	31.42	5.15					
	Average bottleneck (N1/N2 = 5e-3)	Long bottleneck (500y)	u weak	Model 7	0.1	0.06	< 0.01	5.3	52	51.3	0.33	0.05	< 0.01	5.3	28.4	45	0.13	0.02	< 0.01	3.06	34.25	7.75					
			u average	Model 8	0.13	0.1	< 0.01	5.4	51.5	50.8	0.41	0.06	< 0.01	5.4	28.8	44.4	0.20	0.05	< 0.01	2.73	33.64	7.47					
			u strong	Model 9	0.09	0.07	0.01	5.6	51.1	49.7	0.3	0.08	< 0.01	5.4	28.4	41.2	0.14	0.03	< 0.01	2.59	32.68	6.13					
		Short bottleneck (100y)	u weak	Model 10	0.11	0.11	< 0.01	5.4	50.9	51.3	0.28	0.08	< 0.01	5.3	28.2	44.6	0.18	0.04	< 0.01	3.24	32.85	7.20					
			u average	Model 11	0.18	0.09	0.02	5.7	51.8	52	0.38	0.07	< 0.01	5.4	28.6	45	0.17	0.03	< 0.01	3.52	33.60	7.72					
			u strong	Model 12	0.04	0.09	0.01	5.4	51.1	51.4	0.23	0.05	< 0.01	4.9	28.7	43.6	0.18	0.05	< 0.01	3.06	33.82	6.89					
	Weak bottleneck (N1/N2 = 5e-2)	Long bottleneck (500y)	u weak	Model 13	0.13	0.05	0.02	5.7	51.5	50.9	0.31	0.03	< 0.01	5.6	28.4	45	0.19	0.11	< 0.01	3.02	33.02	7.52					
			u average	Model 14	0.06	0.08	< 0.01	5.4	50.7	51.6	0.2	0.08	< 0.01	5.3	28	44.6	0.27	0.04	< 0.01	2.86	33.59	7.08					
			u strong	Model 15	0.09	0.09	0.02	5.3	51.3	51.1	0.32	0.08	< 0.01	5.1	28.7	44.2	0.21	0.04	< 0.01	2.96	32.79	7.33					
		Short bottleneck (100y)	u weak	Model 16	0.11	0.11	< 0.01	5.3	52	50.7	0.25	0.07	< 0.01	5.2	28.6	44.1	0.24	0.03	< 0.01	3.01	33.52	7.55					
			u average	Model 17	0.09	0.08	0.01	5.4	51.3	51.1	0.37	0.08	< 0.01	5.3	28	44.7	0.09	0.01	< 0.01	2.94	33.79	7.45					
			u strong	Model 18	0.12	0.09	0.01	5.4	52.1	51.1	0.31	0.06	< 0.01	5.3	29.4	44.7	0.21	0.06	< 0.01	2.91	33.94	7.50					
Average expansion (N0/N2 = 10)	Intense bottleneck (N1/N2 = 5e-4)	Long bottleneck (500y)	u weak	Model 19	0.13	0.07	< 0.01	5.1	51.5	48.9	0.34	0.06	< 0.01	5.1	28.3	40.9	0.27	0.02	< 0.01	2.88	32.58	5.91					
			u average	Model 20	0.11	0.08	< 0.01	4.2	48.1	32.7	0.28	0.08	< 0.01	4	25.6	21.7	0.02	0.01	< 0.01	0.91	23.99	0.86					
			u strong	Model 21	0.09	0.11	< 0.01	3.9	29	27.8	0.22	0.1	< 0.01	4.6	14.2	18.5	< 0.01	< 0.01	< 0.01	< 0.01	0.23	5.80					
		Short bottleneck (100y)	u weak	Model 22	0.11	0.08	0.01	5.3	51.4	50.7	0.39	0.09	< 0.01	5.1	28.1	44.6	0.16	0.03	< 0.01	2.78	33.40	7.15					
			u average	Model 23	0.05	0.11	< 0.01	5	51	46.3	0.3	0.09	< 0.01	5	28	37.3	0.10	0.03	< 0.01	2.38	31.60	5.08					
			u strong	Model 24	0.08	0.07	0.03	4.4	44.7	25.7	0.24	0.04	0.02	4.5	22.4	16.9	0.00	< 0.01	< 0.01	0.31	15.66	0.27					
	Average bottleneck (N1/N2 = 5e-3)	Long bottleneck (500y)	u weak	Model 25	0.09	0.1	< 0.01	5.3	51.1	50.6	0.33	0.03	0.01	5.1	28.3	44.3	0.26	0.01	< 0.01	2.86	33.48	7.01					
			u average	Model 26	0.11	0.07	0.01	5.7	51.2	48.5	0.28	0.04	< 0.01	5.8	27.9	40.5	0.15	0.03	< 0.01	2.62	32.48	5.78					
			u strong	Model 27	0.05	0.05	0.03	4.5	48.3	34	0.19	0.03	0.01	4.7	25.3	24.1	0.03	< 0.01	< 0.01	0.94	23.92	1.20					
		Short bottleneck (100y)	u weak	Model 28	0.07	0.09	0.02	5.1	52.4	51.3	0.26	0.09	0.01	4.9	29.1	45	0.25	0.05	< 0.01	3.04	33.52	7.24					
			u average	Model 29	0.12	0.12	0.01	5.7	50.9	50.9	0.28	0.08	0.01	5.5	28.5	43.9	0.19	0.04	< 0.01	3.13	32.51	7.16					
			u strong	Model 30	0.03	0.13	0.01	5.3	50.3	47.5	0.22	0.08	< 0.01	5.3	27.5	38.8	0.18	0.02	< 0.01	2.68	31.62	5.29					
	Weak bottleneck (N1/N2 = 5e-2)	Long bottleneck (500y)	u weak	Model 31	0.09	0.07	< 0.01	5.5	51.2	52.2	0.27	0.04	< 0.01	5.5	28.6	45.9	0.25	0.08	< 0.01	3.04	33.75	7.40					
			u average	Model 32	0.12	0.1	0.01	5.4	52.1	52.4	0.27	0.09	< 0.01	5.4	29.2	45.1	0.26	0.01	< 0.01	2.94	34.27	7.47					
			u strong	Model 33	0.1	0.04	< 0.01	5.7	51.2	50.2	0.3	0.03	< 0.01	5.5	28.4	43.3	0.23	0.02	< 0.01	2.68	32.63	6.57					
		Short bottleneck (100y)	u weak	Model 34	0.11	0.12	< 0.01	5.5	51.1	51.8	0.3	0.07	< 0.01	5.5	28.4	45.4	0.22	0.04	< 0.01	3.04	33.17	7.20					
			u average	Model 35	0.12	0.12	0.02	5.7	51.7	51	0.34	0.04	0.02	5.3	28.8	44.9	0.21	0.05	< 0.01	3.16	33.46	7.00					
			u strong	Model 36	0.1	0.12	< 0.01	5.4	51.9	51.6	0.41	0.07	< 0.01	5	29	46.5	0.17	0.06	< 0.01	3.07	34.65	7.86					
Large expansion (N0/N2 = 100)	Intense bottleneck (N1/N2 = 5e-4)	Long bottleneck (500y)	u weak	Model 37	0.11	0.06	< 0.01	4.6	47.8	32.9	0.26	0.07	< 0.01	4.5	25.1	22.3	0.04	0.00	< 0.01	1.09	23.80	0.86					
			u average	Model 38	0.13	0.14	< 0.01	4	29	27.1	0.31	0.17	< 0.01	4.5	13.7	17.9	0.00	0.00	< 0.01	0.01	0.19	5.48					
			u strong	Model 39	14.72	46.7	2.73	74.3	50.6	99.94	15.47	47.1	2.9	74.1	40.2	99.98	11.72	43.37	0.90	70.09	32.74	98.71					
		Short bottleneck (100y)	u weak	Model 40	0.04	0.12	0.01	5.1	50	46.6	0.2	0.05	< 0.01	4.9	27.3	37.9	0.14	0.02	< 0.01	2.49	30.92	4.64					
			u average	Model 41	0.06	0.04	< 0.01	3.8	45	26.5	0.21	0.02	< 0.01	4	22.8	17.9	< 0.01	< 0.01	< 0.01	0.28	16.27	0.21					
			u strong	Model 42	0.13	0.57	0.04	7.1	24.6	71.5	0.65	0.61	0.02	7.9	13.1	75.9	0.01	< 0.01	< 0.01	0.88	0.18	49.14					
	Average bottleneck (N1/N2 = 5e-3)	Long bottleneck (500y)	u weak	Model 43	0.11	0.09	< 0.01	4.7	51.6	49.2	0.39	0.04	< 0.01	4.7	28.5	41.8	0.16	0.06	< 0.01	2.61	33.32	6.13					
			u average	Model 44	0.08	0.06	0.01	4.8	48.3	33.9	0.32	< 0.01	0.01	4.4	24.6	23.9	0.03	0.00	< 0.01	1.20	23.50	1.33					
			u strong	Model 45	0.1	0.18	< 0.01	4	31.5	47.3	0.37	0.18	< 0.01	4.8	15.2	52.5	< 0.01	< 0.01	< 0.01	0.00	1.04	14.08					
		Short bottleneck (100y)	u weak	Model 46	0.09	0.08	0.02	5.2	52	51.7	0.29	0.09	0.01	4.9	29.5	45	0.13	0.06	< 0.01	3.28	34.06	7.09					
			u average	Model 47	0.12	0.06	< 0.01	5.2	51.2	48	0.38	0.04	< 0.01	4.9	28.8	39.4	0.20	0.01	< 0.01	3.02	32.28	5.24					
			u strong	Model 48	0.14	0.05	< 0.01	4.3	47.1	40.1	0.35	0.05	< 0.01	4.5	24.2	37.8	0.02	< 0.01	< 0.01	0.88	20.29	3.17					
	Weak bottleneck (N1/N2 = 5e-2)	Long bottleneck (500y)	u weak	Model 49	0.1	0.09	< 0.01	5.1	52.1	51.9	0.36	0.05	< 0.01	5.1	29.7	45.5	0.22	0.02	< 0.01	2.84	34.11	7.57					
			u average	Model 50	0.11	0.09	0.01	5.2	51.3	50.9	0.27	0.05	< 0.01	5.1	28.3												