



Figure S1. Geographical position of Golestan Province in Iran and distribution map of *Phalaris* genus, Circles represent *P. minor*, squares represent *P. brachystachys*, triangles represent *P. paradoxa*

Table S1. Geographical location, collection site of *Phalaris* genus biotypes

Species	Statues	Geographical location			Collection site
		Province	UTM coordinate		
<i>P. minor</i>	R	Golestan	304994	4094381	Wheat field
	S	Golestan	299195	4096390	Wheat field
<i>P. paradoxa</i>	R	Golestan	306742	4090452	Wheat field
	S	Golestan	296930	4090432	Wheat field
<i>P. brachystachys</i>	R	Golestan	303097	4085868	Wheat field
	S	Golestan	269860	4076834	Wheat field