Table S1. Statistics of microsatellite markers computed using GENALEX (Peakall and Smouse, 2006): Mean and SE per family of sample size (N), number of alleles (Na) and effective number of alleles (Ne).

Peakall R O D, Smouse P E (2006). GENALEX 6: genetic analysis in Excel. Population genetic 7 software for teaching and research. *Mol Ecol Resour* **6**: 288-295.

		Tspe52d	Tspe52b	Tspe52k	Ttsu56d	Tspe53a	Ttsu55a	Ttsu59j	Tspe51i	Ttsu58i	Tspe51a	Tspe51o	Tspe51b	Tspe51d	Tspe52a	Tspe53b	Ttsu57
N	Mean	14,786	14,743	14,786	14,800	13,586	14,743	14,614	14,771	14,757	14,600	14,729	13,729	14,814	14,714	14,714	14,557
	SE	0,084	0,097	0,088	0,085	0,101	0,088	0,138	0,079	0,085	0,101	0,136	0,089	0,087	0,096	0,087	0,125
Na	Mean	3,357	3,557	3,043	3,100	2,457	3,386	3,414	3,557	3,371	3,086	3,314	3,343	2,886	3,086	3,157	3,014
	SE	0,093	0,101	0,103	0,122	0,128	0,110	0,103	0,107	0,096	0,103	0,101	0,104	0,111	0,090	0,090	0,103
Ne	Mean	2,836	3,024	2,557	2,611	2,116	2,840	2,912	3,014	2,917	2,601	2,896	2,827	2,408	2,633	2,705	2,538
	SE	0.084	0.092	0.101	0.107	0.109	0.103	0.098	0.089	0.101	0.096	0.097	0.091	0.094	0.085	0.085	0.099

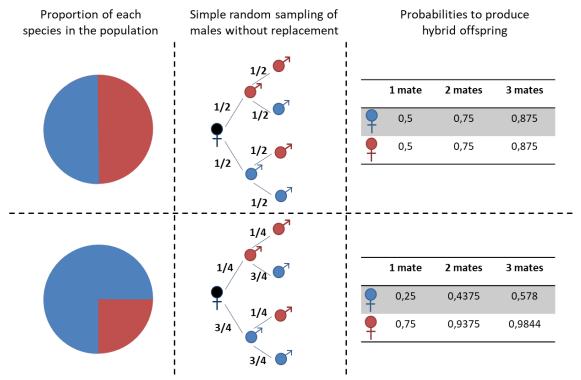


Figure S1. Statistical view of the role of polyandry showing that it should spread hybridization faster than monandry. We hypothesize here that females mate randomly with males of both species (red and blue) according to their proportions in the population (left panel). Mates per female therefore correspond to a random sampling of one or two males without replacement (central panel). More mates, whatever the female species (red or blue), systematically leads to an increase of the probability of producing hybrid offspring (right panel).