

APPENDIX S4. Variation in the *rpS16* segment in three populations of *Cereus saddianus* (S103D, Cáceres, Mato Grosso, Brazil; S99A and S99B, Rondonópolis, Mato Grosso, Brazil).

Population	55	59	Inv ^a	740	742	782	792
S103D1	T	—	a1	A	G	T	—
S103D4	•	A	a1	•	T	•	A
S99A1	•	—	a1	T	A	—	A
S99B1	A	—	a2	•	•	•	A

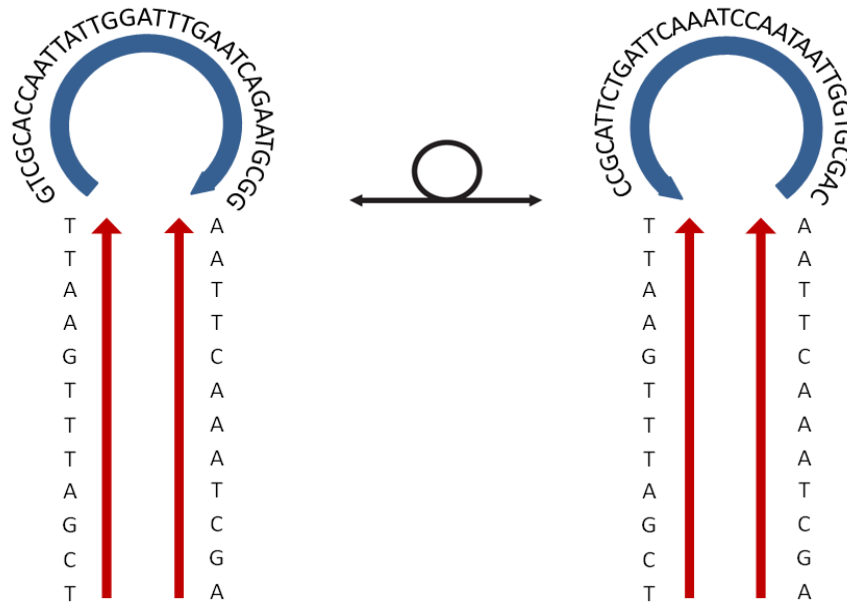
Note: — = indel; • = identical base; inv = inversion.

^a a1 = CCGCATTCTGATTCAAATCCAATAATTGGTGCGAC;

a2 = GTCGCACCAATTATTGGATTGAATCAGAATGCGG.

The secondary structure (A) and the alignment of sequences between 280 and 350 bp (B), highlighting the 35-bp inversion (in bold, with arrows in blue). The arrows in red show the formation of the hairpin structure. This inversion model is called a “hairpin-associated inversion” (HAI, see more in Borsch and Quandt, 2009). S72F4: *C. fernambucensis* subsp. *fernambucensis* from Ubatuba, São Paulo, Brazil; S99A1 and S99B1: *C. saddianus* from Rondonópolis, Mato Grosso, Brazil; S103D1 and S103D4: *C. saddianus* from Cáceres, Mato Grosso, Brazil.

A



B

