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Methods are described in Schweizer (1976), Hojsgaard & al. (2009) and Rivarola Sena & al. (2013).

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POACEAE

Paspalum lilloi Hack.

$n = 10$, $2n = 2x = 20$, CHN. Argentina, Misiones, Iguazú, Iguazú National Park, 17 Dec 2013, E.J. Martínez 3 (CTES, MNES); 12 Jan 1994, G.H. Rua 127 (BAA) (Fig. 8A–D).

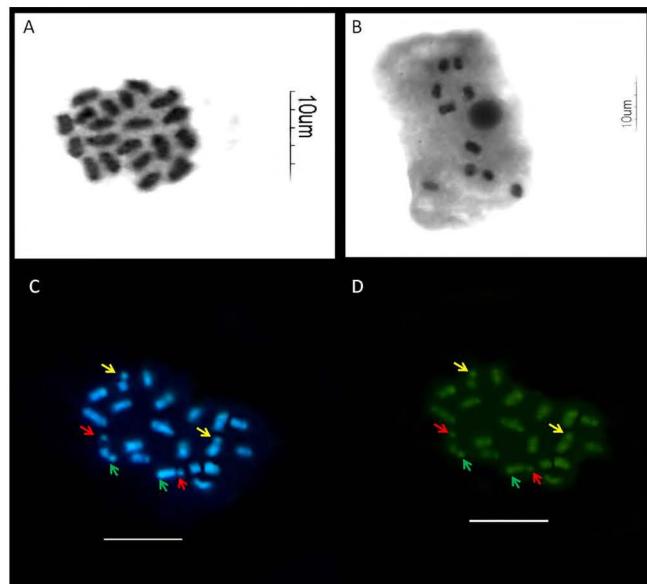


Fig. 8. *Paspalum lilloi*. **A**, Mitotic metaphase, $2n = 20$ chromosomes. **B**, PMC at diakinesis with 10 bivalents and a persistent nucleolus. **C & D**, Mitotic cell with $2n = 20$ chromosomes, staining with CMA/DA/DAPI: **C**, DAPI staining; **D**, CMA/DA staining. Red arrows indicate CMA+/DAPI⁻ microsatellites, yellow arrows shows CMA+/DAPI+ microsatellites and green arrows point to CMA+/DAPI-heterochromatin blocks. — Scale bars = 10 μ m.

Paspalum lilloi Hack. is an endemic species from Iguazú Falls. Karyomorphometric analyses and meiotic behaviour description are presented for the first time for the species. It showed unimodal and symmetrical karyotype (IA according to Stebbins's categories, 1971), comprising 20 metacentric chromosomes (Fig. 8A) whose length is ranging from 2.8 to 1.6 µm, and 22.69 µm per haploid genome. Chromosomes behave regularly at meiosis, with mainly 20II at diakinesis and also 9II+2I, 8II+4I, 7II+6I, 6II+8I (Fig. 8B). At diakinesis and metaphase I, the mean frequency of I was 3.085 ± 0.358 per pollen mother cell (PMC) and 8.457 ± 0.209 II per PMC.

Tri-staining with CMA/Distamycin-A/DAPI fluorochromes revealed the presence of two pairs of bands localized on two microsatellites, in pair 3 and 9, respectively. Chromosomes were arranged, according to the total chromosome length. The microsatellite of the short arm on pair 3 was GC-rich (CMA+/DAPI0), and a GC-rich (CMA+) terminal band on the long arm of these chromosomes was detected. The pair 9 showed an AT-rich band as well as a GC-rich (CMA+/DAPI+) microsatellites, both localized on the short arm (Fig. 8C, D).

Karyotype, and heterochromatin pattern are presented for the first time for the species.

Literature cited

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