Online journal ISSN - 1676-5680
GMR Genetics and Molecular Research
EVOLUTION AND TECHNOLOGY

Unusual chromosome numbers in *Paspalum* L. (Poaceae: Paniceae) from Brazil

A.P.S. Peñaloza[1], A.L. Côrtes[2], M.T. Pozzobon[1], S. Santos[1], G.H. Rua[2,3] and J.F.M. Valls[1]

[1]Embrapa Recursos Genéticos e Biotecnologia, Brasília, DF, Brasil
[2]Centro Universitário de Brasília, Brasília, DF, Brasil
[3]Facultad de Agronomía, Universidad de Buenos Aires,
Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET),
Argentina

Corresponding author: A.P.S. Peñaloza
E-mail: andrea@cenargen.embrapa.br

Genet. Mol. Res. 7 (2): 399-406 (2008)
Received January 17, 2008
Accepted February 25, 2008
Published April 29, 2008

ABSTRACT. Somatic chromosome numbers were determined for 20 new germplasm accessions of *Paspalum*, belonging to 17 species collected in Brazil. Chromosome number is reported for the first time for *P. reduncum* (2n = 18), *P. cinerascens* (2n = 20), *P. cordatum* (2n = 20), *P. filgueirasii* (2n = 24), *P. ammodes* (2n = 36), *P. bicilium* (2n = 40), *P. heterotrichon* (2n = 40), and *P. burmanii* (2n = 48). New cytotypes were confirmed for two germplasm accessions of *P. carinatum* (2n = 30) and *P. trachycoleon* (2n = 36), one of *P. clavuliferum* (2n = 40) and one of *P. lanciflorum* (2n = 40), indicating variability in these species. The remaining chromosome numbers reported here confirm previous counts. The unexpected chromosome numbers 2n = 18, 24, 36, and 48 in *Paspalum* species, which are usually shown to be multiples of 10, suggest that much more collection and cytogenetic characterization are necessary to assess the whole chromosomal and genomic multiplicity present in the genus, which seems to be much more diverse than currently thought to be.

Key words: Cytogenetics; Cytotaxonomy; Polyploidy; Morphology

