

The presentation of chromosome numbers in this report conforms with the format described in the first publications of this series (Spies & Du Plessis 1986 a & b).

POACEAE

Aristideae

Aristida congesta Roem. & Schult. subsp. *congesta*:
n = 22.

TRANSVAAL.—2530 (Lydenburg): 14 km from Boshhoek to Diep-
geset (–AC), *Spies 1537*.

Eragrostideae

Eragrostis barbinodis Hack.: **n = 25.**

TRANSVAAL.—2528 (Pretoria): 35 km from Warmbaths to Preto-
ria (–AB), *Spies 2046*.

Eragrostis curvula (Schrad.) Nees: **n = 20, 30, 40.**

TRANSVAAL.—2430 (Pilgrim's Rest): 18 km from turnoff on
Lydenburg-Ohrigstad road to Pilgrim's Rest (–DC), *Spies 1557* (n =
40), *1559* (n = 20). 2530 (Lydenburg): 10 km from Boshhoek to Buf-
felsvlei (–AC), *Spies 1526* (n = 30).

CAPE.—3224 (Graaff-Reinet): 23 km from Pearston to Graaff-Rei-
net (–BD), *Spies 1139* (n = 20).

Eragrostis lehmanniana Nees: **n = 20, 30.**

CAPE.—3224 (Graaff-Reinet): 2 km from Jansenville to Kirkwood
(–DD), *Spies 1099* (n = 20). 3225 (Somerset East): 35 km from
Somerset East to Pearston (–CA), *Spies 1135* (n = 20). 3325 (Port
Elizabeth): 1 km from Lake Mentz to Waterford (–AA), *Spies 1083*
(n = 30), *1094* (n = 20).

Eragrostis plana Nees: **n = 10.**

TRANSVAAL.—2530 (Lydenburg): 11 km from Goede Hoop to
Lydenburg (–AB), *Spies 1506*.

CAPE.—3227 (Stutterheim): Kabusi Forest (–CB), *Spies 1697*.

Eragrostis planiculmis Nees: **n = 21.**

TRANSVAAL.—2530 (Lydenburg): 31 km from Lydenburg to
Roosenekal (–AB), *Spies 1620*.

Eragrostis superba Peyr.: **n = 20, 40.**

TRANSVAAL.—2529 (Witbank): 67 km from Lydenburg to Roos-
enekal (–BB), *Spies 1625* (n = 40).

O.F.S.—2925 (Jagersfontein): near Perdeberg (–AA), *Spies 2003*
(n = 20).

Eragrostis trichophora Coss. & Dur.: **n = 30.**

TRANSVAAL.—2528 (Pretoria): near Sphinx Station (–CA), *Spies*
2031.

Pogonarthria squarrosa (Roem. & Schult.) Pilg.: **n =**
40.

TRANSVAAL.—2528 (Pretoria): near Sphinx Station (–CA), *Spies*
2020.

Sporobolus africanus (Poir.) Robyns & Tournay: **n =**
30.

CAPE.—3225 (Somerset East): 7 km from Somerset East to
Pearston (–CB), *Spies 1129*. 3228 (Butterworth): near Sunrise-On-Sea
(–CC), *Spies 1659*.

Sporobolus pectinatus Hack.: **n = 20.**

TRANSVAAL.—2530 (Lydenburg): 13 km from Boshhoek to Buf-
felsvlei (–AC), *Spies 1530*.

Cynodontae

Chloris gayana Kunth: **n = 10.**

CAPE.—3228 (Butterworth): near Sunrise-On-Sea (–CC), *Spies*
1660.

Chloris virgata Swartz: **n = 10.**

TRANSVAAL.—2528 (Pretoria): near Sphinx Station (–CA), *Spies*
2021.

O.F.S.—2925 (Jagersfontein): near Perdeberg (–AA), *Spies 2005*.

DISCUSSION

These chromosome numbers conform, in most instances, with the numbers for either the species itself or for other species in the same genus, given in the chromosome atlases of Darlington & Wylie (1955), Ornduff (1967–1969), Fedorov (1969), Moore, R. J. (1970–1977), Moore, D. M. (1982) and Goldblatt (1981 & 1984). The only exception was *Eragrostis planiculmis* with $2n = 42$ instead of a multiple of 10 expected in the Eragrostideae. Since 21 bivalents were observed in every cell studied, it is concluded that this specimen, *Spies 1620*, represents an aneuploid form of *E. planiculmis* with $2n = 4x + 2 = 42$.

Meiotic chromosome pairing was normal in most specimens studied.

Two univalents were observed in every cell of a diploid *Eragrostis plana* specimen, *Spies 1506*. This asynapsis of a chromosome pair may perhaps be attributed to hybridization.

REFERENCES

- DARLINGTON, C. D. & WYLIE, A. P. 1955. *Chromosome atlas of flowering plants*. Allen & Unwin, London.
- FEDOROV, A. A. 1969. *Chromosome numbers of flowering plants*. Academy of Science, Leningrad.
- GOLDBLATT, P. 1981. Index to plant chromosome numbers 1975–1978. *Monographs of Systematic Botany* 5: 1–553.
- GOLDBLATT, P. 1984. Index to plant chromosome numbers 1979–1981. *Monographs of Systematic Botany* 8: 1–427.

MOORE, D. M. 1982. *Flora Europaea—checklist and chromosome index*. University Press, Cambridge.

MOORE, R. J. 1970–1977. Index to plant chromosome numbers for 1968–1974. *Regnum Vegetabile* 68; 77; 84; 91; 96.

MOORE, R. J. 1973. *Index to plant chromosome numbers for 1967–1971*. Oosthoek Uitgevers, Utrecht.

ORNDUFF, R. 1967–1969. Index to plant chromosome numbers for 1965–1967. *Regnum Vegetabile* 50; 55; 59.

SPIES, J. & DU PLESSIS, H. 1986a. Chromosome studies on African plants. 1. *Bothalia* 16: 87–88.

SPIES, J. J. & DU PLESSIS, H. 1986b. Chromosome studies on African plants. 2. *Bothalia* 16: 269–270.

J. J. SPIES* and A. JONKER*

* Botanical Research Institute, Department of Agriculture and Water Supply, Private Bag X101, Pretoria 0001, RSA.