

## Th. W. J. Gadella: Some cytological observations in the Loganiaceae III

Previously, the chromosome numbers of some species of *Loganiaceae* were dealt with (GADELLA, 1961, 1962, 1963). The chromosome numbers of 7 species are reported in this paper, of which 4 species, all belonging to the genus *Strychnos*, had not been investigated cytologically before. The materials, kindly supplied to me by Dr. A. J. M. Leeuwenberg and by Ir. F. Breteler, were collected in the form of seed-samples in the Ivory Coast and in Cameroun. The plants of 2 species originate from botanical gardens. Living material of all species (except for *Strychnos lernata* Gilg. ex Lwb.) is grown in the botanical garden of Wageningen (WAG). The determination of the chromosome numbers was based on the study of roottip-mitoses. Roottips of the plants were fixed in Karpechenko, embedded in paraffin, sectioned at 15 micron and stained according to Heidenhain's haematoxylin method. The results may be summarized as follows:

1. *Nuxia floribunda* Benth.:  $2n = 38$   
Origin of the material: S. Africa, obtained from the University of Stellenbosch. Seeds probably collected in the wild.  
Herbarium material of the mother-plant: J. J. Bos, no. 310 (WAG).  
Herbarium material of seedling: A. J. M. Leeuwenberg no. 3665 (WAG).  
References: GADELLA (1963):  $2n = 38$ .
2. *Strychnos dinklagei* Gilg.:  $2n = 44$   
Origin of the material: Ivory Coast, Forêt d'Abouabou, between Abidjan and Grand Bassam.  
Herbarium material of the mother-plant: R. A. A. Oldeman no. 845 (WAG).  
Herbarium material of the seedling: A. J. M. Leeuwenberg no. 3561 (WAG).  
References: GADELLA (1963):  $2n = 44$ .
3. *Strychnos innocua* Del. subsp. *innocua*:  $2n = 44$   
Origin of the material: Ivory Coast, 16 km S. of Ferkéssédougou.  
Herbarium material of the mother-plant: A. J. M. Leeuwenberg no. 4435 (ABI, WAG).
4. *Strychnos millepunctata* Leeuwenberg:  $2n = 44$ <sup>1)</sup>  
Origin of the material: Ivory Coast, Forêt d'Abouabou, between Abidjan and Grand Bassam.  
Herbarium material of the mother-plant: J. J. F. E. de Wilde & A. J. M. Leeuwenberg no. 3447 (ABI, WAG).
5. *Strychnos samba* Duvign.:  $2n = 44$   
Origin of the material: Cameroun, 4 km S. of Nguélémondouka.  
Herbarium material of the mother-plant: F. J. Breteler no. 2051 (WAG).
6. *Strychnos spinosa* Lam.:  $2n = 44$   
Origin of the material: obtained from the botanical garden of Groningen, the Netherlands, origin unknown.

Herbarium material of cutting: A. J. M. Leeuwenberg no. 3564 (WAG).  
 References: MANGENOT and MANGENOT (1958):  $2n = 44$ .  
 MIÈGE (1960):  $2n = 44$ .  
 GADELLA (1962):  $2n = 44$ .

7. *Strychnos ternata* Gilg. ex Leeuwenberg:  $2n = 44$ <sup>1)</sup>  
 Origin of the material: Cameroun, 27 km from Bertoua on road to Bétaré Oya.  
 Herbarium material of the mother-plant: F. J. Breteler no. 2196 (WAG).  
 Herbarium material of the seedling: F. J. Breteler no. 2994 (WAG).

Twenty-one species of the genus *Strychnos* have been studied up to the present. The following chromosome numbers have been counted:  $2n = 24$  (3 species, counted by MOHRBUTTER, 1936);  $2n = 44$  (16 species);  $2n = 88$  (2 species). From these data the conclusion may be drawn that the more common basic number of the genus *Strychnos* is  $X = 11$  or  $X = 22$ .

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<sup>1)</sup> These species were recently described by A. J. M. LEEUWENBERG (Acta Botanica Neerlandica **14**: 218-229. 1965).