

CHROMOSOME NUMBERS OF GARDEN TULIPS

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In recent years various research workers (HOLITSCHER 1968; PLAVCOVÁ 1969 a and b, 1971; ZEILINGA & SCHOUTEN 1968) have determined the chromosome number of many cultivars of garden tulips (*Tulipa gesneriana*, *T. greigii*, *T. kaufmanniana* and *T. fosteriana*). It was found that the majority of the cultivars were diploid ($2n = 24$), a small number triploid ($2n = 36$), whereas tetraploids occurred only sporadically. Table 1 shows 45 cultivars of which the chromosome numbers were determined for the first time. Part of these cultivars are very old and emanate from the Hortus bulborum at Limmen; the others were recently raised and made available by the breeders. From the table it appears that 42 of the cultivars were diploid and 3 triploid.

Table 1. Chromosome numbers of 45 garden tulip cultivars.

1. *Cultivars with $2n = 36$*

Alma mater (SLT)

Iceberg (SLT)

spatheolata major (gesn)

2. *Cultivars with $2n = 24$*

Annie Salomons (gre)

Artus (SET)

aurantiaca (gesn)

Canary Bird (SET)

Captain's Favourite (gre)

Carravagio (DET)

Centenaire (Dwt.)

Chrysolora (SET)

Costa Diva (SLT)

Frühlingsstimme (gre)

Flotow (Trt.)

Gala Premiere (gre)

Giant Parrot (gre)

Gipsy Princess (gre)

Grand Gala (gre)

Grand Prestige (gre)

Grand Maitre (DET)

Golden Horn (SET)

Gloria Solis (DET)

Growers Pride (gre)

ixioides (gesn)

Jan Toorop (DET)

Karatau (gre)

La Paloma Blanca (Trt.)

Le Matador (DET)

Leen van der Mark (Trt.)

Lovely Surprise (fost)

lutea (gesn)

Melodie d'Amour (gre)

March of Time (gre)

Nasa (Trt.)

New Era (gre)

Noble Venture (gre)

Ophir d'Or (SET)

pallida (gesn)

Prince de Ligne (SET)

Roi Cramoisie (SET)

Rosamundi Huykman (SET)

Roos van Dekama (SET)

Triangle (gre)

Wapen van Leiden (SET)

Waterloo (SET)

DET = Double Early Tulip; SET = Single Early Tulip; SLT = Single Late Tulip; Dwt. = Darwin Tulip; Trt. = Triumph Tulip

gesn = *Tulipa gesneriana*; gre = *T. greigii*; fost = *T. fosteriana*

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— (1969b): Nieuwe gegevens over chromosoomtellingen bij tulpen. *Weekbl. Bloembollencult.* 80: 328.

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ZEILINGA, A. E. & H. P. SCHOUTEN, (1968): Polyploidy in garden tulips I. A survey of *Tulipa* varieties for polyploids. *Euphytica* 17: 252-264.