




# CHROMOSOME RESEARCH

*The Biology of Chromatin and Chromosomes*



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In this research, the somatic chromosome numbers of six taxa of the genus *Marrubium* L. growing naturally in Turkey were identified. Of the taxa of the genus *Marrubium* (Lamiaceae), *Marrubium vulgare* L. has somatic chromosome number of  $2n = 34 + 2B$ , *Marrubium vulcanicum* Hub.-Mor.  $2n = 32$ , *Marrubium bourgaei* Boiss. subsp. *bourgaei*  $2n = 30$ , *M. bourgaei* Boiss. subsp. *caricum* P.H. Davis and *Marrubium astracanicum* subsp. *astracanicum* Jaq.  $2n = 20$ , *Marrubium peregrinum* L.  $2n = 34$ . Chromosome numbers of the three taxa examined are presented for the first time.

**Keywords:** Chromosome number, *Marrubium*, Lamiaceae

### 8.P3

#### New chromosome numbers of genus *Stachys* L. (sect. *Eriostomum* (Hoffmanns. & Link) Dumort., Lamiaceae) from Turkey

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Diploid chromosome numbers of 26 *Stachys* L. (Sect. *Eriostomum* (Hoffmanns. & Link) Dumort., Lamiaceae) taxa, collected from different localities in Turkey, were counted for the first time, except *Stachys byzantina* C. Koch and *Stachys thirkei* C. Koch. In this study, all the *Stachys* taxa determined were diploid with chromosome numbers counted as  $2n = 30$ . The research has made contribution to the taxonomic revision of the genus *Stachys* (Sect. *Eriostomum*) in Turkey.

**Keywords:** Chromosome number, *Eriostomum*, Labiatae, *Stachys*

### 8.P4

#### Cytogenetic studies in some endangered Italian cattle breeds raised in southern Italy

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Endangered local animal breeds are very important to keep the biodiversity. Their genetic characterization is one of the steps necessary to perform this goal. In this study, 60 cattle (*Bos taurus*,  $2n = 60$ ) kept at the ConSDABI Center, mostly from Agerolese breed (20 animals), underwent cytogenetic investigation to ascertain the presence of chromosome abnormalities. Slides were treated for CBA- and RBA-banding techniques, as well as for sequential RBA/CBA banding. Some case was also investigated using bovine BAC clones and the FISH mapping technique to better characterize chromosome abnormalities. Five animals (8.3%) were found carriers of the following chromosome abnormalities: XX/XY chimera (freemartinism) in two females from Agerolese to Modicana breeds, which were both sterile for abnormal internal sex adducts: rob(1;29) at the homozygous ( $2n = 58$ ) and heterozygous ( $2n = 59$ ) conditions in two females of Garfagnina and Varzese-Otonese breeds, respectively, and a new and unusual reciprocal translocation in a heifer of Agerolese breed involving chromosomes 11 and 25.

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