

## Mediterranean chromosome number reports – 21

edited by G. Kamari, C. Blanché & S. Siljak-Yakovlev

### Abstract

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This is the twenty first of a series of reports of chromosome numbers from Mediterranean area, peri-Alpine communities and the Atlantic Islands, in English or French language. It comprises contributions on 16 taxa: *Alyssum* from Iran, by S. Bolourian, A. Tavassoli & M. Pakravan (Nos 1737-1743); *Genista* from Italy, Sardinia and Corse by T. Cusma Velari, L. Feoli Chiapella & G. Bacchetta (Nos 1744-1748); *Genista* from Greece, Cyprus and Israel, by T. Cusma Velari & L. Feoli Chiapella (Nos 1749-1750); *Isoëtes* from Sicily, by A. Troia, P. Marino & A. M. Orlando (No 1751), *Pilosella* from Italy, by E. Di Gristina, A. Geraci & P. Marino (No 1752).

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### Report (1751) by A. Troia, P. Marino & A. M. Orlando

**1751. *Isoëtes todaroana*** Troia & Raimondo —  $2n = 22$  (Fig. 1).

**Si:** Mazara del Vallo (province of Trapani), contrada “Critazzo”, 37°41’07”N, 12°37’05”E, ca. 60 m a.s.l., May 2010, *Angelo Troia* (PAL).

*Isoëtes todaroana* is a terrestrial/amphibian species recently described from one single site in Sicily (Troia & Raimondo 2010a), and its chromosome number is reported here for the first time.

The genus *Isoëtes* includes both diploids ( $2n = 22$ ) and polyploids (3x, 4x, 5x, 6x, 8x, 10x, 12x) (Troia 2001). Particularly worthy of mention is the high proportion of polyploids with respect to diploids: according to Troia & Raimondo (2010b), the percentage of polyploid species in the genus is between 56 and 59%.

Our observations show that the species is diploid. In the Mediterranean area, diploid species (usually terrestrial or amphibian) are relatively more common than polyploid ones, but aneuploidy also occurs (e.g. *I. histris* Bory with  $2n = 20$ , cf. Cesca & Peruzzi 2001). According to Taylor & Hickey (1992), *I. todaroana* should be another of the diploid terrestrial species resulting from gradual speciation via isolation and genetic divergence, in contrast to aquatic species in which interspecific hybridization and chromosome doubling processes prevail.

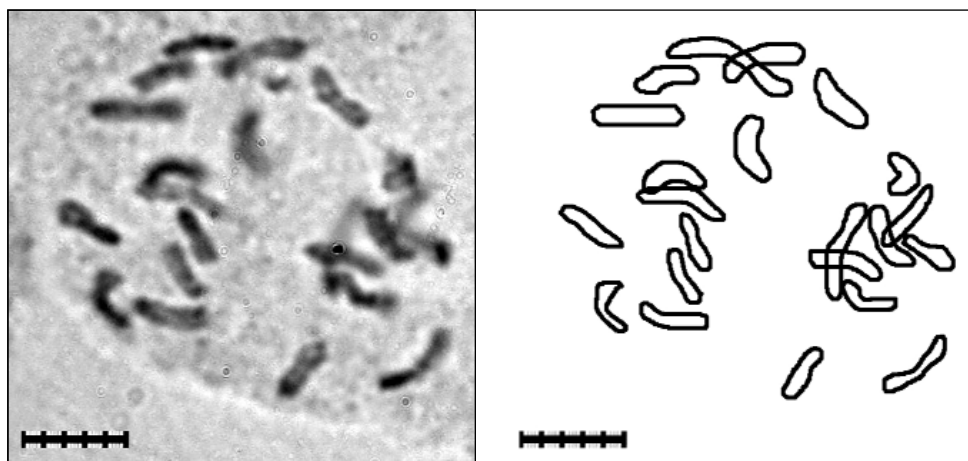


Fig. 1. Mitotic metaphase plate (microphotograph and explanatory drawing) of *Isoetes todaroana* with  $2n = 22$ . – Scale bars = 5  $\mu$ m.

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## Reports (1752) by E. Di Gristina, A. Geraci & P. Marino

**1752.** *Pilosella sphaerocephala* (Rchb.) F. W. Schultz & Sch. Bip. —  $2n = 27$  (Fig. 1).

**It:** Trento, Moena, Passo San Pellegrino, moorlands on acid soil, 1910 m a.s.l., 46° 22' N, 11° 46' E, 08 Aug 2011, E. Di Gristina (PAL).