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## First record of *Campylopus oerstedianus* (Dicranaceae, Musci) in Sicily

### Abstract

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*Campylopus oerstedianus* has recently been collected for the first time in Sicily. It is a rare species known from isolated localities in Europe, Costa Rica, Jamaica and North Carolina. This new record suggests that *C. oerstedianus* is possibly in spreading in the European part of its range. As the scattered distribution in the Caribbean and Mediterranean areas is concerned, this suggests a range of circum-Tethyan origin.

*Campylopus oerstedianus* (Müll. Hal.) Mitt. is a submediterranean-oceanic species, included in the Red Data Book of European Bryophytes as “rare”, according to IUCN categories modified by ECCB (Schumacker & Martiny 1995). In Italy it is reported by Cortini Pedrotti & Aleffi (1992) as “endangered”.

In Europe it is reported from France, Corse, Spain, Switzerland, Greece, Italy (Düll 1984-85, 1992, 1995) and recently also from Germany (Frahm 2000). As to Italy it is known from Campania, Lombardia (Cortini Pedrotti 1992) and Trentino Alto Adige where it has been collected by Milde and described by Limpricht (1887) as *C. mildei*. Under this name the species has been reported from Europe until Frahm (1980) included it in *C. oerstedianus* described earlier from Costa Rica.

Besides Europe and Costa Rica the species is known in Jamaica and North Carolina (Crum & Anderson 1981).

*C. oerstedianus* is a heliophilous species which grows preferably on very acid substrata in arid surroundings (Düll 1991). Generally it occurs on rocks but in North America it colonizes also ground (Crum & Anderson 1981).

In Sicily *C. oerstedianus* has been collected, together with *Bryum torquescens* Bruch & Schimp., on corticolous fungus *Phellinus torulosus* (Pers.) Bourd. & Galz. which grows on a *Pinus halepensis* Mill. log inside an artificial woody plantation on Monte Pellegrino promontory, N of Palermo. The bryoflora of this area has been recently studied (Aiello & al. 1996) but this taxon was not found. In this new locality *C. oerstedianus* does grow neither on rocks, which are calcareous, nor on other substrata (Figs. 1, 2).

Voucher specimens are kept in the Herbarium Mediterraneum (PAL).

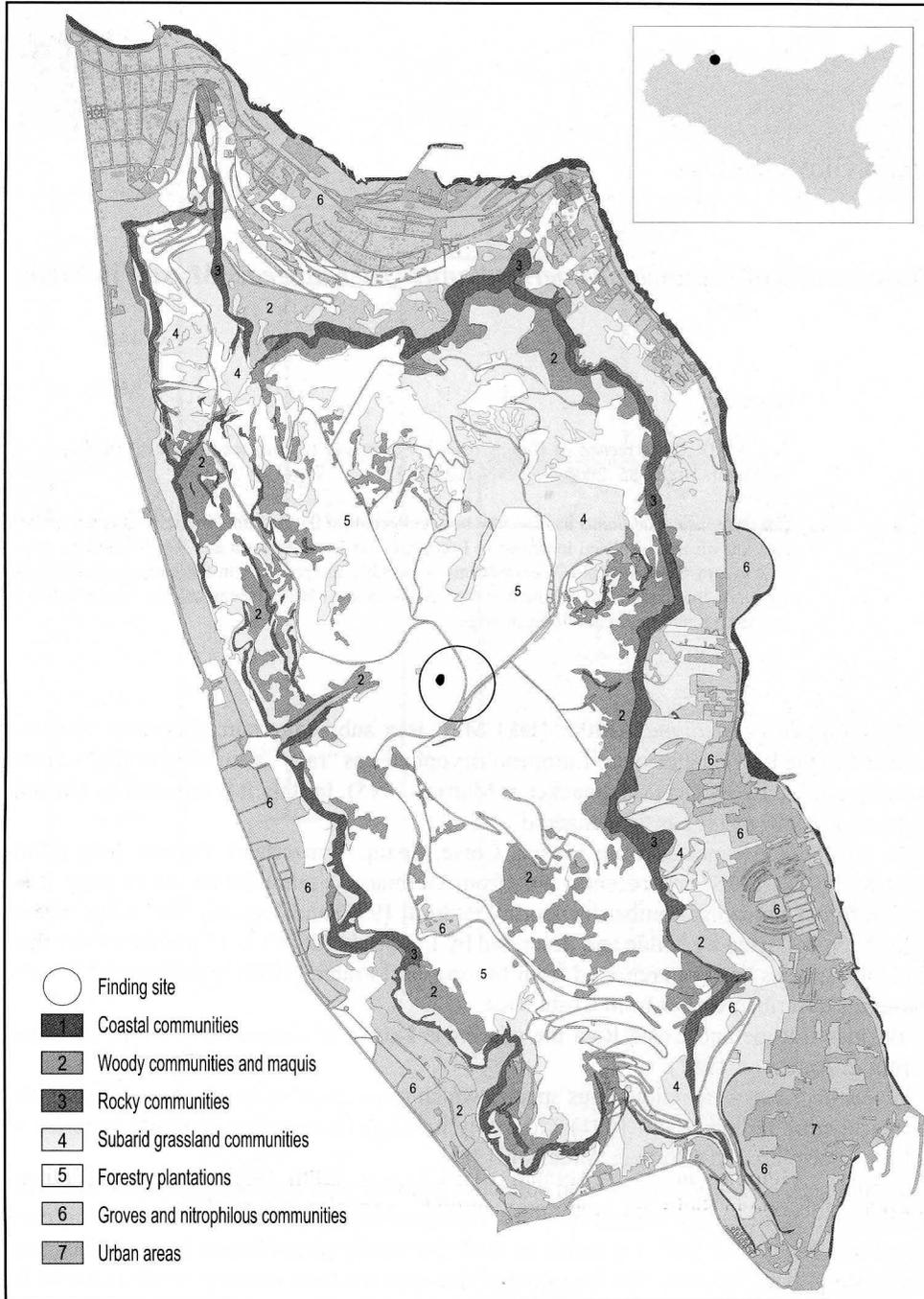


Fig. 1 - Location of the finding site of *Campylopus oerstedianus* on Monte Pellegrino (Vegetation Map from Surano & al, 1996) and in Sicily.



Fig. 2 - Particular of colony of *Campylopus oerstedianus* on fungus *Phellinus torulosus* from sicilian specimen.

This species is distinguished from the others of the genus by its ventral hyaline cells with large lumen (hyalocysts), its single dorsal stereid band and its projecting cells not forming lamellae in transverse sections of costa (Fig. 3). This latter character, together with oblique upper lamina cells (Fig. 4) and short hairpoint, will distinguish *C. oerstedianus* from the similar species *C. pilifer* Brid. and *C. introflexus* (Hedw.) Brid.

*C. oerstedianus* is unknown with sporophyte and it propagates only vegetatively. As a consequence of this its distribution in isolated localities is difficult to explain. The distribution along the shores of the Caribbean and Mediterranean Sea suggests a circum-Tethyan range and thus a late Mesozoic age (Frahm 1991).

The recent findings in France (Frahm 1989), Greece (Düll 1995), Germany (Frahm 2000) and this one in Sicily let supposed it could be a species in spreading.

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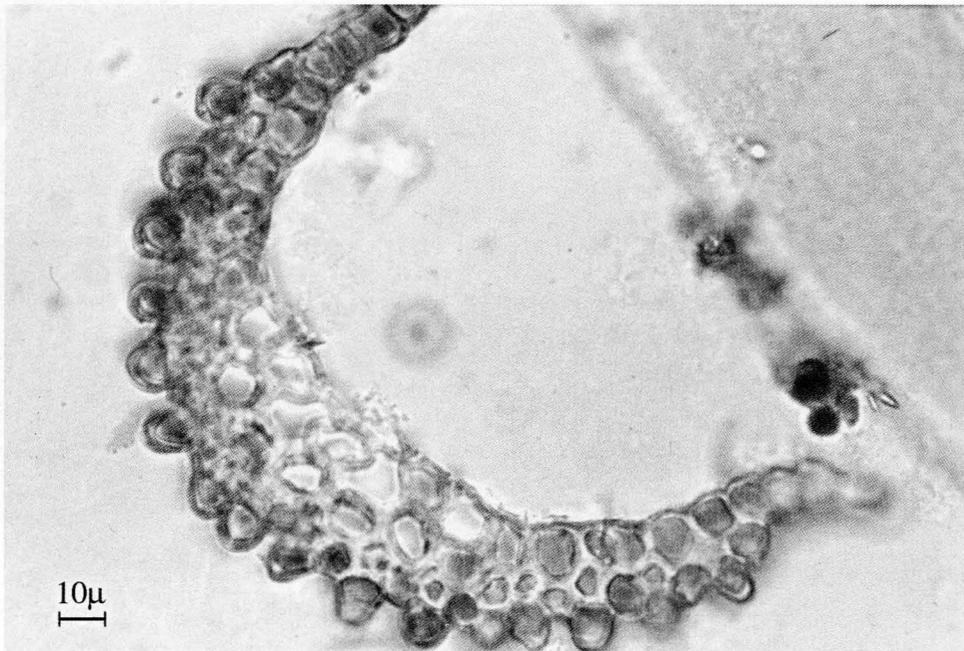


Fig. 3 - Leaf transverse section of *Campylopus oerstedianus* from sicilian specimen.

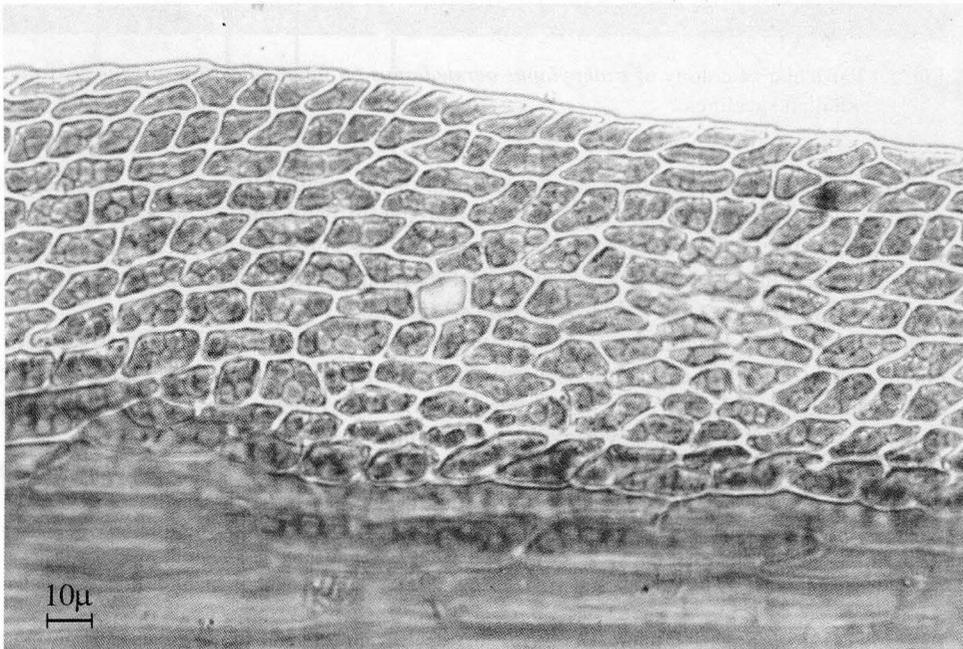


Fig. 4 - Upper lamina cells of *Campylopus oerstedianus* from Sicilian specimen.

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