

DESCHAMPSIA ANTARCTICA AND COLOBANTHUS QUITENSIS: HOW THEY PENETRATED TO ANTARCTICA?

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Flora of Antarctica is restricted by two species of vascular plants: *Deschampsia antarctica* Desv. (*Poaceae*) and *Colobanthus quitensis* (Kunth) (*Caryophyllaceae*). These species also vegetate in the southern regions of Argentina and Chile and sub-Antarctic. They are believed that their areal seems to include the maritime Antarctic and western coast of the Antarctic Peninsula from the middle Holocene. At the same time flora of the surrounding sub-Antarctic islands occasionally may exceed 60 species (as exemplified by Kerguelen island). Nowadays numerous members of *Colobanthus* and *Deschampsia* genera are widely propagated in the Southern Hemisphere. However, the reasons for exclusive propagation of these two species are elusive so far. In accord with the dispersal concept dissemination of these two species could occur through the one thousand kilometres wide the Drake Passage. It is hard to explain in this case the mechanisms of a transfer and why during the Holocene or earlier periods Antarctica was not invaded by other sub-Antarctic species. *Caryophyllaceae* is known ever since Oligocene, while *Poaceae* could emerge and propagate on the Gondwana territory as early as in the tertiary times. Due to findings in Antarctica of the Eocene *Caryophyllaceae* and *Poaceae* the hypothesis on *C. quitensis* and *D. antarctica* vegetation to the fragments of this supercontinent is entitled to existence. The drift of Antarctica to the pole was resulted in the extinction of the vascular flora. Contemporary two species could survive until now in the western coast of the Antarctic Peninsula, in the area of warming effect of circumpolar current. There are necessary serious studies of the Antarctic populations of *D. antarctica* and *C. quitensis* to ascertain their relationship with South American and sub-Antarctic populations. Similar investigations should be also carried out for relative species from *Deschampsia* and *Colobanthus* genera of the Southern Hemisphere circumpolar area.