

**RARE AND ENDANGERED TROPICAL AND SUBTROPICAL
PLANTS IN POLAR ALPINE BOTANICAL GARDEN
COLLECTIONS**

L. L. Viracheva, L. A. Ivanova

*N. A. Avrorin Polar Alpine Botanical Garden
18^A Fersmana Str., Apatity 184209, Russia
E-mail: viracheva-ljubov@yandex.ru*

Received 23 January 2019, Accepted 25 March 2019

The results of species diversity analysis of a group of rare and endangered tropical and subtropical plants in the greenhouse of Polar-alpine botanical garden are presented 129 species of plants belonging to 74 genera of 35 families that need protection is revealed. All of them are included in the database of the International Union for Conservation of Nature (IUNC): extinct in the wild (conservation status EW) – 1 species; endangered species (conservation status EN) – 11 species; vulnerable species (conservation status VU) – 13 species; near threatened species (conservation status NT) – 9 species; least concern species (conservation status LC) – 95 species. Noted that 69 rare and endangered species in the collection are in the sowing state, 60 species are in the generative state (39 species annually or periodically bloom, but do not form fruits; 21 species reach fruiting phase, seed bearing and sporulation; the bloom of *Caryota mitis* Lour. and appearance of strobile bay *Cycas revoluta* Thunb. was observed only once during the entire cultivation). 18 plant species give germinating seeds. Most rare plants are counted in the family *Cactaceae* Juss. (77 species of 29 genera).

Key words: The Arctic, introduction, protected ground, tropical and subtropical plants, rare and endangered species.

DOI: 10.18500/1682-1637-2019-1-18-29

REFERENCES

Demidov A. S., Potapova S. A. Activities of botanical gardens of Russia to preserve and increase collection funds. In: *Botanical gardens in the 21st century: biodiversity conservation, development strategy and innovative solutions: Materials of International scientific and practical conference*. Belgorod: POLITERA Publ., 2009. pp. 3 – 5. (in Russian).

Plants of the Red Book of Russia in the collection of botanical gardens and arboretums. Moscow: MBG of RAS; Tula: Grif and K Publ. 144 p. (in Russian).

РЕДКИЕ И ИСЧЕЗАЮЩИЕ ТРОПИЧЕСКИЕ РАСТЕНИЯ

Takhtadjyan A. L. *Magnoliefites system*. St. Petersburg: Nauka Publ., 1987. 338 p. (in Russian).

The IUCN Red List of Threatened Species. 2017-3. <http://www.IUNC.Redlist.org> (Accessed 5-December-2018).

The Plant List, 2013. Version 1.1; URL: <http://www.theplantlist.org> (Accessed 5-December-2018).

Cite this article as:

Viracheva L. L., Ivanova L. A. Rare and endangered tropical and subtropical plants in Polar Alpine Botanical Garden collections. *Bulletin of Botanic Garden of Saratov State University*, 2019, vol. 17, iss. 1, pp. 18 – 29. (in Russian).

DOI: 10.18500/1682-1637-2019-1-18-29.