



NDF WORKSHOP
WG 4 – Geophytes and Epiphytes
CASE STUDY 2 SUMMARY
Galanthus woronowii
Country – **Georgia**
Original language – English

ASSESSING HARVEST LEVELS FOR *GALANTHUS WORONOWII* LOSINS K. IN GEORGIA AND THE CHALLENGE OF PRODUCING A NON-DETRIMENT FINDING

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Galanthus woronowii (fam. Amaryllidaceae) – is a highly attractive geophyte listed in CITES Appendix II, is a bulbous perennial distributed in South Russia, Georgia and Turkey. For more than 10 years, millions of *Galanthus* bulbs have been exported from Georgia to Turkey and Western Europe. This international trade is regulated by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Georgia becoming a Party in 1997.

An export quota for this species is established on an annual basis by the Scientific Authority, based on available data. In 2005 the Georgian Law on Licenses and Permits was adopted. This law was a pioneer in Georgian legislation establishing that the export, import, re-exports and introduction from the sea of the specimens of species included in Appendices of CITES require appropriate permits.

Despite the fact that international trade in *Galanthus* has a relatively long history, neither a formal management plan nor an effective monitoring system have been established to ensure sustainable trade and conservation of wild populations. It is still unclear what is the *Galanthus* stock in traditional cultivation fields and no robust scientific assessment of wild stocks has been undertaken. In order to assess the wild stock of *Galanthus woronowii* in Georgia and evaluate current volume of *Galanthus* production on the sites of artificial propagation, a cooperative CITES project between Georgian scientists and experts from the Royal Botanic Gardens, Kew, United Kingdom, has been established. This project "Improving the implementation of CITES for *Cyclamen coum* and *Galanthus woronowii* from Georgia" is financially supported by the government of Netherlands and is an official CITES project. The project is in fact an NDF study; the preparatory phase is currently on-going, and the field observations will take place in spring 2009.

Based on the experience of harvesting and stock assessment of *Galanthus* in recent years, a revised process of NDF is being proposed. This process has identified criteria, parameters and/or indicators used to be in future NDF studies. The different criteria will be applied to artificial propagation sites and wild populations. To ensure the sustainability of wild populations the total number of individuals, in sampling areas extrapolated over the entire population area, before and after the harvest will be compared to identify trends in the population

demography. The main parameters will be the number of adult individuals of commercial bulb size in sampling area and natural death rates.

An extensive survey of published and unpublished literature sources will be undertaken prior to the commencement of actual field research. This will also include the documents stored at the Ministry of Environment Protection and Natural Resources and reports prepared by international working groups. Information on geographical distribution and ecological peculiarities of target populations will be extracted from herbarium material stored at different herbaria in Georgia and outside the country. In the field, random sampling method will be utilised aimed at the collection of comprehensive data on the numbers of plants per population and spatial distribution patterns. Field data will be statistically analysed and incorporated into GIS. This information will be used to make Non-Detriment Findings, establish quotas and put in place management plans and monitoring systems that are suited to the conditions in Georgia.