

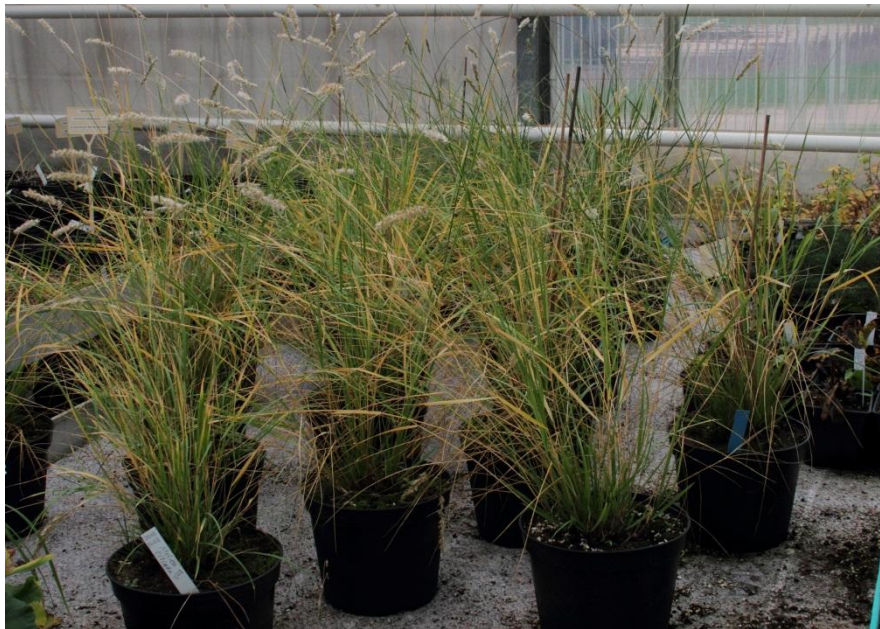
# Min. of five taxa in population increase scheme

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## Milestone C.6

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*Melica ciliata* at Kumpula Botanic garden greenhouse in 2013. © Marko Hyvärinen

The numbers of species and individuals are reported in the increasing scheme of threatened plant species in Oulu and Helsinki Botanic Gardens both for living plant collections and reintroductions to nature.

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ESCAPE LIFE+2011 BIO/FI/917

### Milestone C.6

#### Aims and activities in the Action C.6

The number of species and individuals are targeted to be increased in *ex situ* – cultivation in the Botanic gardens of Oulu and Kumpula botanic gardens. The number of threatened plants in the *ex situ* – collections need to be increased in order to strengthen the potential for national security storage of rare plants and for plant conservation outreach work. Furthermore, numbers of individuals of rare plants need to be increased in *ex situ* – conditions for conservation tasks such as reintroduction and population increasing in small natural populations. The list of species and individuals present in the two botanic gardens in the autumn 2014 are listed in this report below.

- Purpose of the Action: Increase the numbers of species and individuals of threatened plants in *ex situ* – living collections and in population increasing schemes in natural populations, and producing *ex situ* – cultivated material for plant reintroductions.
- The Action C.6 continues producing larger collections of threatened plants in botanic gardens, but also the increasing schemes of individuals in natural populations. It will co-operate closely with other ESCAPE actions, especially actions C.1, C.2, C.4, C.8 and D.1

#### The numbers of threatened plant species and individuals added to living collections of UH and UO *ex situ* – collections during the ESCAPE project 2012-2014

The lists include new accession to the living collections in the Oulu Botanic Garden (UO) and Kumpula Botanic Garden, Helsinki (UH) after the starting of ESCAPE project in 2012. The enlargement of the stock in the botanic gardens is indicated as numbers of individual plants or pots.

*Campanula cervicaria*, about 100 individuals, UO 2013

*Dianthus deltoides* (two different origins), 50 +90 individuals, UO 2013

*Rosa canina*, about 80 individuals, UO 2014

*Rosa sherardii*, about 80 individuals, UO 2014

*Euphrasia bottnica*, 12 individuals, UO 2014

*Silene tatarica*, 18 individuals, UO 2014

*Thalictrum minus* subsp. *Kemense*, 12 individuals, UO 2014

*Trifolium aureum*, 9 individuals, UO 2014

*Campanula cervicaria*, 12 individuals, UO 2014

*Geranium palustre*, 8 individuals, UO 2014 – no success, eaten by a hare

*Carex arenaria*, 7 individuals, UH 2014

*Agrimonia pilosa*, 4 individuals, UH 2014

*Bromus benekenii*, 10 individuals, UH 2014

Total number of new accession in the two botanic gardens during the ESCAPE project 2012-2014 is 13.



Figure 1. The head gardener Tuomas Kauppila shows the *Rosa canina* bed in Oulu Botanic garden in August 2014 ©Sanna Laaka-Lindberg

## The numbers of threatened plant species in population increasing scheme for natural populations and species reintroductions

*Puccinellia phryganodes*, (Fig. 1), 18 pots, UO – 100 individuals both to be reintroduced and in AM trials in 2015

*Crepis tectorum* subsp. *nigrescens*, about 15 individuals, UO – 90 individuals in population increasing scheme in 2014

*Salix pyrolifolia*, 5 scions, UO

*Arctophila fulva* var. *pendulina*, about 20 pots, UO – to be increased further in 2015

*Melica ciliata*, 66 individuals, UH – reintroduced 51 individuals in 2013, 4 ind. in UO and 15 in UH botanic gardens

*Astragalus glycyphyllos*, at least 5 individuals, UH

*Armeria maritima* subsp. *intermedia*, 130, UH – reintroduced 130 individuals in 2014

*Viola collina*, about 100 individuals, UH, UO - also in *in vitro* cultivation in UO

*Viola uliginosa*, about 48 individuals, UH – reintroduced 40 individuals in 2014

*Hypericum montanum*, 150 UH, reintroduced 130 individuals in 2014

Total number of taxa in population increasing scheme for natural populations and reintroductions produced during the ESCAPE project 2012-2014 is 10.



Figure 2. *Puccinellia phryganodes* in ex situ - cultivation in Oulu Botanic Garden 2014. ©Tuomas Kauppila