After 10 years of observations Norsk Naturary collect a lot of information about the area covered by Ajuga reprans in Nordmarka. Over 20 stands of Ajuga reptans has been found. This stands concentrate in 3 main locations which can be call as: Nesseterdalen, Finntjern and Gørjehøgda. Nesseterdalen is the most abundant location of *Ajuga reptans* and their populations are rather pure, almost without cross-breed specimens with *A. pyramidalis*. The distance between this main locations is no bigger than 1 -2 km. Also distances between established stands are sometimes very shot (less than 50 m) and very often new plants are founded between stands. That amount of information gives a possibility to draw on the map the range of *Ajuga reptans* distribution in Nordmarka. But to keep control of a quantity and quality of population it is necessary to establish stands which are permanently marked in the terrain. 5 of that stands have been established: 3 of them in Nesseterdalen,1 in Finntjern and 1 in Gørjehøgda.

2.1. Latinsk navn (Latin name)

Ajuga reptans L.

2.2 Rødlistestatus (redlist satus)

EN

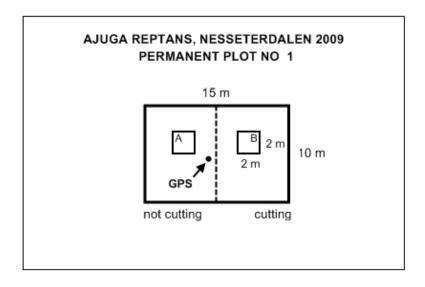
- 2.3 Utbredelse (spreading/place)
- 2.4 Lokaliteter i Norge (locations in Norway)
- 2.4.1. Lokaliteter i Oslo (locations in Oslo)

3 known (Nesseterdalen, Finntjern, Gørjehøgda)

Location: 1. Nesseterdalen - former (**Lokalitet 1. Dellokalitet 8.** Nesseterdalen, Oslo)

A permanent plot was established and marked in the terrain. See Fig.1.

Fig.1.



A new stand with a size 10×15 m is a part of former "Dellokalitet 8". This stand can be used for dokumentation and detailed observation about *Ajuga reptans* number and condition and a changes of vegetation in this site. Western half of this stand $(10 \times 7.5 \text{ m})$ will be keep without any protection activity and eastern part $(10 \times 7.5 \text{ m})$ will be mowed. For a detailed observations 2 spots "A" and "B" with a size 2 x 2m has been marked in western and eastern halfs of a stand.

Individuals: 170 flowering (in new established stand 10 x 15 m)

A $(2 \times 2 \text{ m}) - 11 \text{ flowering}$

B $(2 \times 2 \text{ m}) - 33 \text{ flowering}$

Area: 10 x 15 m, with two spots 2 x 2 m

Environment (habitat): Transitional part between very wet, flat bank of a small stream and a humid, fertile hill slope. Some years ago big spruce trees has been cutted from this place. Tall herbs and Alnus incana dominate wet places. With other species: *Aconitum firmum, Caltha palustris, Carex flava, Carex rostrata, Dactylorhiza maculata, Equisetum silvaticum, Filipendula ulmaria, Fraxinus exelsior, Listera ovata, Paris quadrifolia, Phalaris arundinacea, Ranunculus repens, Valeriana officinalis* and the others.

Condition: Very rich stand with numerous flowering plants.

Care: Eastern half of the stand will be moved to compare how it affect *Ajuga reptans* growing.

GPS-koordinates: 0598856/6660530

Date of watch: 15.06.2009; 29.06.2009

Owner:

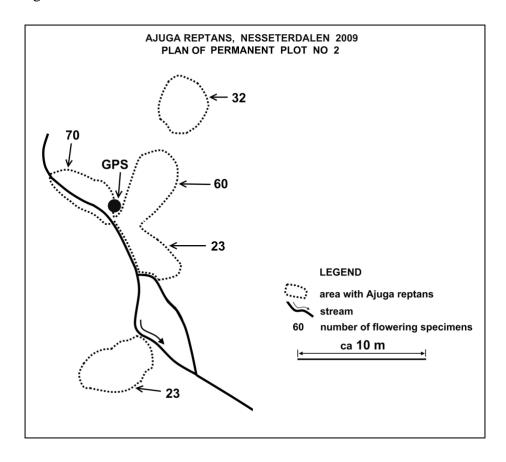
Photos: No 2771 – 2775. (R. Gramsz)

Observer: A. Andresen, R. Gramsz,

Location: 2. Nesseterdalen - former (**Lokalitet 1. Dellokalitet 1. Nesseterdalen**, Oslo.)

A permanent plot was established and its situational plan has been drawn. Fig.2.

Fig.2.



Individuals: 220 flowering in whole area (number of flowering plants in concentrations on drawing – Fig.2.

Area: 20 x 25

Environment (habitat): Open area after forest cutting. Mostly wet places with tall herbs along small stream but also quite dry spot between stream and foot path. With: *Aconitum firmum, Alnus incana, Equisetum silvaticum Filipendula ulmaria, Geum rivale, Ranunculus repens, Sorbus aucuparia, Valeriana officinalis and the others.*

Condition: Very rich stand with numerous flowering plants

Care: Dead branches have been removed and dense grass and herbs cuted.

GPS-koordinates: 0598782/6660623

Date of watch: 15.06.2009; 29.06.2009

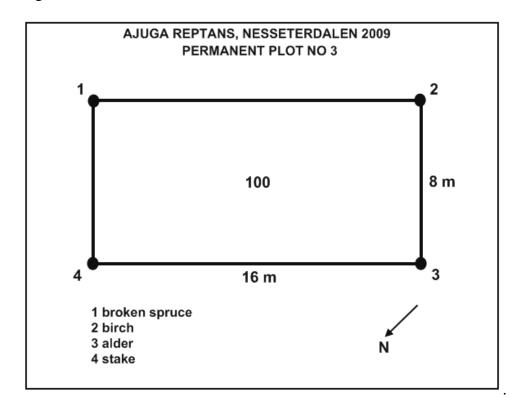
Owner:

Photos: No 2777 - 2781 (R. Gramsz)

Observer: A. Andresen; R. Gramsz,

Location: 3. Nesseterdalen - former (**Lokalitet 1. Dellokalitet 6.** Nesseterdalen, Oslo.)

A permanent *plot* was established and its situational plan has been drawn. Fig.3 Fig.3.



Individuals: 100 flowering

Area: 8 x 16 m

Environment (habitat): Rocky hill slope expose to S; SE with thin forest and abundant herbs. Quite fertile and humid soil. With: Aconitum firmum, Actea spicata, Alnus incana, Anemone nemorosa, Betula sp., Circaea alpina, Galium odoratum, Paris qudrifolia, Picea abies, Hepatica nobilis, Oxalis acetosella, Polygonatum verticillatum, Pteridium aquilinum, Ranunculus repens, Stachys silvatica, dentaria bulbifera, Sorbus aucuparia, Stellaria media, Urtica dioica and the others.

Condition: Very rich stand with numerous flowering plants

Care: -

GPS-koordinates: 0598837/6660905

Date of watch: 1.07.2009

Owner:

Photos: No 2786 - 2790 (R. Gramsz)

Observer: A. Andresen; R. Gramsz,

Location: 4. Finntjorn – former (Lokalitet 1. Dellokalitet 17(19?) Oslo.

The new established permanent plot is only a little bigger than former "Dellokalitet 17(19?)"

Individuals: 40 flowering

Area: 8 x 15 m

Environment (habitat): S facing slope, sometimes wet with small springs, covered by spruce forest. Forest is rather dense and dark, with a small clearings only. Ajuga is growing in some concentrations almost without other plant on dark places or together with other herbs in clearings. The stand is in the edge of small clearing. With: *Aconitum firmum, Anemone nemorosa, Fragaria vesca, Hepatica nobilis, Hypericum maculatum, Paris quadrifolia, Picea abies, Pteridium aquilinum, Pyrola rotundifolia, Ranunculus repens, Rubus sp., Sorbus aucuparia, Stachys sivatica, Vaccinium myrtillus and the others.*

Condition: Not very much flowering plants in a dark places but *Ajuga* survive well, may be because of luck of competition. Quite a lot of *Ajuga* concentrations and single plants are growing between the stand and forest road (~100 m).

Care: Fallen trees and branches are removed from the stand.

GPS-koordinates: 0598045/ 6659797

Date of watch: 1.07.2009

Owner:

Photos: No 2795; 2798 (R. Gramsz)

Observer: A. Andresen; R. Gramsz,

Location: 5. Gørjehøgda – former (krp 031 – in Arild GPS)

All **Gørjehøgda** populations of *Ajuga reptans* consist of specimens cross-breed with A. pyramidalis. The new established permanent plot is covered by population which seams to be most pure in Gørjehøgda region.

Individuals: ? flowering (there is a few concentrations of not flowering plants)

Area: 10 x 30 m

Environment (habitat): W facing slope, close to the top of Gørjehøgda. Area is covered with a spruce forest but with a large clearings with meadow vegetation and sparsely growing ashes Fraxinus excelsior. This region could be a former pasture. The stand is on steep and rocky clearing with tall herbs. With: Aconitum lycoctonum ssp. septentrionale cfr., Alnus incana, Anemone nemorosa, Calamagrostis arundinacea, Dryopteris filix-mas, Filipendula ulmaria, Fraxinus excelsior, Gymnocarpium dryopteris, Hepatica nobilis, Majanthemum bifolium, Melampyrum sylvaticum, Melandrium rubrum, Melica nutans, Oxalis acetosella, Picea abies, Phegopteris connectilis, Prunus padus, Solidago virgaurea, Sorbus aucuparia, Stachys sylvatica

Condition: Plants are sparsely growing among tall grass and herbs, seldom flowering

Care: -

GPS-koordinates: 0596610/6660081

Date of watch:15.07.2009

Owner:

Photos: 2872 - 2875 (R. Gramsz)

Observer: A. Andresen; R. Gramsz, J. Potocka

Caution!

A new established plots are mark in terrain with some sticks cut off in the forest or mark with plastic tape in existing trees. For the future researches signs should be more solid and better visible.