# <u>Dracocephalum ruyschiana – 2021</u>



# 2.1. Latinsk navn (Latin name)

Dracocephalum ruyschiana L.

As **individual** we treat a tuft (cluster, or – ecological term – ramet) with shoots growing visibly from one place.

**Juvenile individual** - if a lot of young plants are spread evenly without creating visible tufts we treat area of 25 cm<sup>2</sup> as an individual.

Old desintegrating tufts are counted as more than one individual if it covers more than 25 cm<sup>2</sup>.

# 2.2 Rødlistestatus (redlist satus)

Sårbar. (Vulnerable)

# 2.3 Utbredelse (spreading/place)

The species is found from the Oslofjord to Gudbrandsdalen. Norway has the main population in North-western Europe. Eastern and Central Europe and western and central Asia, extending locally westwards to Norway and the Pyrenees.

# 2.4 Lokaliteter i Norge (locations in Norway)

# 2.4.1. Lokaliteter i Oslo (locations in Oslo)

Now 30 locations observed.

# On the maps depending on the number of individuals, locations are color-coded:

< 10 specimens (white); 11 – 100 specimens (yellow); 101 – 300 specimens (red);

> 300 specimens (violet)

# **BAKKEHAUGEN** – 2021



Location: Bakkehaugen

Individuals: ca. 20 (?)

**Area:** 5 x 10 m (potential area 20 x 100m)

Environment (habitat): Slope SE, W and top of the ridge. Its slopes and top are not mowed but the ridge is surrounded by lawns. Small ridge is covered by rich vegetation. There is rather meadow, than kind of vegetation, which is characteristic for *Dracocephalum* locations. For this reason it is difficult to see vegetative individuals. Trees and bushes: *Ulmus* (glabra?). Herbaceous plants: *Agrostis capillaris, Allium oleraceum, Anthriscus sylvestris, Avenastrum pubescens, Campanula persicifolia, Campanula trachelium, Carex digitata, Dactylis glomerata, Daucus carota, Galium boreale, Galium verum, Geranium sanguineum, G. silvaticum, Knautia arvensis, Fragaria vesca, Festuca rubra, Plantago media, Polygonatum odoratum, Poa pratensis s. lato, Solidago virgaurea, Thymus pulegioides, Trifolium alpestre, Viscaria vulgaris, Rumex acetosa,* 

**Condition:** *Dracocephalum* grows at the top of a small ridge among lush, low vegetation of a meadow character.

Plants were small and blooming very poorly. It was the end of blooming period.

Care: Bjørn Smevold from Norsk Botanisk Forening is taking care of this site.

I believe that this habitat is too fertile and humid for optimal development for *Dracocephalum*. Annual, late summer mowing with the precise removal of the mown biomass outside the habitat could improve the situation.

**GPS-coordinates:** 59°56'47.30"N 10°45'09.60"E

**Date of watch:** 1.07.2021

**Owner:** 

Photos: R. Gramsz Observer: R. Gramsz



Photo 1. Bakkehaugen. Lush vegetation overgrows *Dracocephalym*. 1.07.2021.



Photo 2. The best looking *Dracocephalum* among meadow vegetation. 1.07.2021

# BLEIKØYA - 2021



Map. Dracocephalum ruyschiana - Bleikøya.

< 10 specimens (white)

11 – 100 specimens (yellow)

101 – 300 specimens (red)

> 300 specimens (violet)



Individuals: ca. 540

**Area:** ca.100 x 60m, (0.2ha)

Environment (habitat): Open top of a ridge and a slope facing South. Also in western very steep slope is a concentration of about 10 tufts and a few other plants are spread around. With other species: Alchemilla sp., Allium vineale, Avenula pratensis cfr., Berberis vulgaris, Centaurea jacea, Centaurea scabiosa, Cotoneaster sp., Festuca rubra cfr., Filipendula vulgaris, Fragaria vesca, Fraxinus excelsior, Galium verum, Geranium sanguineum, Hylotelephium telephium ssp. maximum (Sedum telephium = Sedum maximum), Hypericum perforatum, Pimpinella saxifraga, Polygonatum odoratum, Potentilla argentea, Rumex acetosella, Sedum album, Thymus pulegioides, Veronica spicata.

**Condition:** Vegetation on the surface, including *Dracocephalum*, is well developed this year. *Dracocephalum* was in full bloom before mid-June.

**Care:** The area already requires complete mowing with the removal of the mown biomass. This year, we managed to trim the most overgrown bushes in only a few places. *Cotoneaster divaricatus* was removed along with the roots.

**GPS-coordinates:** 59°53'26.52"N 10°44'33.99"E

**Date of watch:** 9,11,28.06., 23,24.08.2021.

Owner:

Photos: R. Gramsz



Photo 1. Top of the hill on Bleikøya1 location. Very lush vegetation with *Dracocephalum* in full flower. 9.06.2021.



Photo 2. NE part of location1 is too overgrown and need mowing. In this year only the bushes have been removed from this part. 9.06.2021.



Individuals: ca. 270

**Area:** 40 x 30 m, (0.109 ha) (potential area 40 x 40 m)

Environment (habitat): Open top of a hill and a slope facing NWN and lower terrace on the East from top. With other species: Acer platanoides, Alchemilla sp., Achillea millefoiulm, Allium vineale, Anthyllis vulneraria, Asplenium trichomanes, Avenula pratensis cfr., Berberis vulgaris, Centaurea jacea, Centaurea scabiosa, Cirsium vulgare, Convallaria majalis, Cotoneaster sp., Erysimum strictum cfr., Festuca ovina, Festuca rubra cfr., Filipendula ulmaria, Filipendula vulgaris, Fragaria vesca, Fragaria viridis, Fraxinus excelsior, Galium boreale, Galium verum, Geranium robertianum, Geranium sanguineum, Geum urbanum, Hepatica nobilis, Hieracium pilosella, Hylotelephium telephium ssp. maximum (Sedum telephium = Sedum maximum), Hypericum perforatum, Leucanthemum vulgare, Lonicera xylosteum, Origanum vulgare, Phydimus spurius (Sedum spurium), Pimpinella saxifraga, Pastinaca sativa, Plantago media, Poa nemoralis, Polygonatum odoratum, Polypodium vulgare, Potentilla argentea, Rhamnus cathartica, Ribes alpinum cfr., Rosa sp., Rubus sp., Sedum album, Sorbus aucuparia, Sorbus domestica cfr., Syringa vulgaris, Thymus pulegioides, Trifolium alpestre, Verbascum sp., Veronica spicata, Viola tricolor, Viscaria vulgaris

**Condition:** Vegetation on the surface, including *Dracocephalum*, is well developed this year. *Dracocephalum* was in full bloom before mid-June.

**Care:** Same as on location 1the area already requires complete mowing with the removal of the mown biomass.

**GPS-coordinates:** 59°53'23.00"N 10°44'33.46"E

**Date of watch:** 9,11,28.06., 23, 24.08.2021.

Photos: R. Gramsz,



Photo 1. Top of a ridge on location Bleikøya 2. 9.06.2021.



Photo 2. Eastern part of location Bleikøya 2, below the main area. 9.06.2021.



**Individuals:** 5

**Area:** 3 x 4 m, (0.001 ha)

**Environment (habitat):** Part of a beach used for boats storage and a rocky ledge about 50 m North from this already known location "3". With: *Rosa sp., Fragaria vesca, Fraxinus excelsior, Geranium sanguineum, Hylotelephium telephium ssp. maximum (Sedum telephium = Sedum maximum), Thymus pulegioides, Polygonatum odoratum and the others.* 

**Condition**: 4 plants are growing along footpath (N side) and one on open area in S side of footpath.

Care: We continue the removal of bushes, mainly Cotoneaster divaricatus.

**GPS-coordinates:** 59°53'24.40"N 10°44'26.22"E

Under a footpath on the northern side of a place for boat storage in winter.

**Date of watch:** 9,11,28.06., 23,24.08.2021.

Owner:

Photos: R. Gramsz



Photo 1. Location 3. One tuft of *Dracocephalum* grows in the open area on the right and 4 small tufts on the left side of the footpath. 28.06.2021.

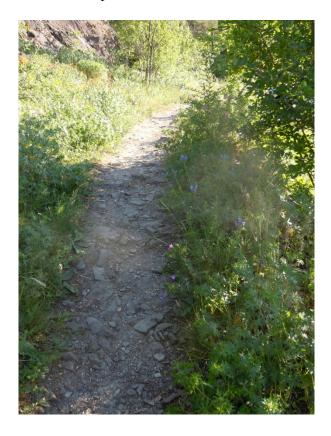


Photo 2. 4 blooming plants on the right side of footpath. 9.06.2021.



**Individuals:** ca.125 (115 + 10)

**Area:**  $100 (120) \times 30 \text{m}$ ,  $(0.133 \text{ ha}) + 5 \times 5 \text{m}$ , (0.005 ha)

Environment (habitat): The slope facing NW mostly overgrown by high bushes and trees (covering ca 50% - after some cutting in last two years). Dracocephalum grows rather sparsely both in the open area and under the bushes. Open area in "winter boat storage place" is included to the main location but another concentration, some 50 m apart is showed separately on the map. Bushes and low trees: Fraxinus excelsior, Cotoneaster sp., Rosa sp., Juniperus communis, Crataegus sp., Pinus sylvestris (several), Rhamnus cathartica, Rosa sp., Sorbus aucuparia, Syringa vulgaris (several); herbs: Anthyllis vulneraria, Asplenium trichomanes, Avenula pratensis cfr., Berberis vulgaris, Briza media, Carex pallescens, Campanula rotundifolia, Centaurea jacea, Filipendula ulmaria, Filipendula vulgaris, Fragaria vesca, Galium verum, Geranium sanguineum, Hepatica nobilis, Inula salicina, Melilotus officinalis cfr., Origanum vulgare, Phydimus spurius (Sedum spurium), Pimpinella saxifraga, Plantago media, Polygonatum odoratum, Polypodium vulgare, Potentilla argentea, Prunella vulgaris, Sedum album, Solidago virgaurea, Thymus pulegioides, Veronica spicata

**Condition:** The surface is better lit after the last cuts of trees and shrubs. In better lit places, *Dracocephalum* blooms more profusely. Plants were still (29.06) in full blooming.

**Care:** By felling trees and shrubs, a path of 2-3m in width was made through the surface and small clearings in the top part. I am planning a small cut on W Slope and then these open areas will be kept.

**GPS-coordinates**: 59°53'23.33"N 10°44'20.56"E

**Date of watch:** 28,29.06. 23,24.08.2021.

**Owner:** 

**Photos:** R. Gramsz



Photo 1. The main part of location with a 2-3m path after cutting down some trees and bushes. 29.06.2021.



Photo 2. *Dracocephalum* in a more lit clearing at the top of the surface 29.06.2021.



Individuals: ca. 22

**Area:** 10 x 30 m, (0.043 ha)

Environment (habitat): Open ridge and a SE slope sparsely overgrown by bushes. With other species: Achillea millefolium, Artemisia campestris, Berberis vulgaris, Centaurea jacea, Cotoneaster sp., Festuca rubra cfr., Fragaria vesca, Fragaria viridis, Galium verum, Geranium sanguineum, Geum urbanum, Hylotelephium telephium ssp. maximum (Sedum telephium = S. maximum), Origanum vulgare, Phydimus spurius (Sedum spurium), Plantago media, Polygonatum odoratum, Prunus spinosa, Rosa sp., Thymus pulegioides, Trifolium arvense, Trifolium pratense, Veronica spicata

**Condition:** It was less visible plants then last years. The site is very dry with shallow, rocky soil. *Dracocephalum* has finished flowering and is hard to see.

Care: Inhabitants mowed part of the area near the path. O.K. but a bit too early - in July.

(This site can be treated as a little "bushy" one. *Dracocephalum* plants are growing quite well here, so let it be a "bushy" site on SE slope on Bleikøya. Another "bushy" site is no 4 but on NW slope. That treatment gives a better diversity of habitats in all locations on Bleikøya.)

**GPS-coordinates:** 59°53'18.52"N 10°44'12.15"E

Top of the hill with the war monument and S and SE slope

**Date of watch:** 9, 29.06. 30.07.2021.

Owner:

Photos: R. Gramsz



Photo 1. Part of the area near the path. There are 12 large *Dracocephalum* clusters here. 9.06.2021.



Photo 2. The same place mowed a bit too early. 30.07.2021.

# Bleikøya 6a



**Individuals:** Ca. 60

**Area:** 5 x 15 m, (0.010 ha)

Environment (habitat): On the open slope facing South, on shallow stony soil. With other species: Allium vineale, Anthyllis vulneraria, Artemisia campestris, Avenula pratensis cfr., Centaurea jacea, Cotoneaster sp., Festuca ovina, Filipendula vulgaris, Fragaria viridis, Galium verum, Geranium sanguineum, Hepatica nobilis, Hylotelephium telephium ssp. maximum (Sedum telephium = Sedum maximum), Hypericum perforatum, Hypochoeris maculata cfr., Jovibarba sobolifera, Origanum vulgare, Pimpinella saxifraga, Polygonatum odoratum, Potentilla argentea, Sedum album, Solidago virgaurea, Syringa vulgaris, Thymus pulegioides, Trifolium arvense, Veronica spicata, Viscaria vulgaris

**Condition:** *Dracocephalum* plants were in full blooming period at the time of observation. There are much fewer plants and large flowering tufts than a few years ago but there are quite a lot of young plants so there is hope that the population will recover here.

**Care**: Bushes were trim a little.

**GPS-coordinates:** 59°53'16.97"N 10°44'5.59"E

**Date of watch:** 9.06., 24.08.2021.

Owner:

**Photos:** R. Gramsz



Photo 1. Location Bleikøya 6a. 9.06.2021.



Photo 2. There are fewer large flowering clusters on the surface, but young plants are growing. 9.06.2021.



**Individuals:** Ca.75

**Area:** 30 x 40m, (0.080 ha)

Environment (habitat): On the open ridge and slope facing south, on shallow stony soil. With other species: Alchemilla sp., Allium vineale, Anthyllis vulneraria, Artemisia campestris, Astragallus gliciphyllos, Campanula rotundifolia, Cerastium sp., Centaurea jacea, Centaurea scabiosa, Erysimum strictum cfr., Festuca ovina, Filipendula vulgaris, Fragaria vesca, Fraxinus excelsior, Galium verum, Geranium sanguineum, Hieracium pilosella, Inula salicina, Origanum vulgare, Phydimus spurius (Sedum spurium), Pimpinella saxifraga, Plantago media, Polygonatum odoratum, Rhamnus cathartica, Rosa sp., Sedum album, Solidago virgaurea, Sorbus hybrida, Syringa vulgaris, Thymus pulegioides

**Condition:** *Dracocephalum* is in full flower. Plants are very fertile, tufts up to 30 cm high and 90% is blooming. The surface is in good condition with a similar number and distribution of plants.

**Care:** As usually some bushes and lilac shouts were cut. *Vincetoxicum rossicum* and *Phedymus spurius* were pull out of the ground.

**GPS-coordinates:** 59°53′16.23″N 10°44′2.88″E

**Date of watch:** 9.06., 24.08.2021.

Owner:

**Photos**: R. Gramsz



Photo 1. View over main part of location Bleikøya 7. 9.06.2021.



Photo 2. Dracocephalum is the most abundant in this fragment of location 7. 9.06.2021.



**Individuals:** ca. 51 (36 +12+ 3)

**Area:**  $4 \times 6 \text{ m}$ ,  $(0.005 \text{ ha}) + 2 \times 4 \text{ m}$ ,  $(0.001 \text{ ha}) + (\text{new from } 2013) 2 \times 3 \text{ m}$ 

Environment (habitat): In a line of bushes aside foot path – 3 places. With other species: Anthyllis vulneraria, Avenula pratensis cfr., Berberis vulgaris, Cotoneaster sp., Festuca ovina, Filipendula vulgaris, Fragaria vesca, Galium verum, Geranium sanguineum, Hylotelephium telephium ssp. maximum (Sedum telephium = Sedum maximum), Juniperus communis, Plantago media, Rhamnus cathartica, Syringa vulgaris, Thymus pulegioides

**Condition:** All 3 sub locations looks very nice. *Dracocephalum* in full blooming and there is also some young plants.

Care: The residents look after these locations and I also mowed location 8a and 8b in this year.

**GPS-coordinates:** 59°53'20.62"N 10°44'22.02"E

Between houses no. 40 and 42, and the toilet.

New place along main path: 59°53'21.4"N 10°44'28.7"E

**Date of watch:** 9.06., 24.08.2021. (mowing)

Owner:

**Photos:** R. Gramsz



Photo1. Location Bleikøya 8a - bigger place, close to toilet. 9.06.2021.



Photo 2. Location Bleikøya 8b - smaller place. 9.06.2021.



Photo 3. Location Bleikøya 8c. 9.06.2021.



**Individuals:** 5

**Area:** 5 x 30 m, (0.011 ha)

Environment (habitat): Open and partly overgrown by bushes ridge in the highest part of Bleikoya over the house no 104. With other species: Achillea millefolium, Artemisia campestris, Berberis vulgaris, Centaurea jacea, Cotoneaster sp., Festuca rubra cfr., Fragaria vesca, Fragaria viridis, Galium verum, Geranium sanguineum, Geum urbanum, Hylotelephium telephium ssp. maximum (Sedum telephium = S. maximum), Origanum vulgare, Phydimus spurius (Sedum spurium), Plantago media, Polygonatum odoratum, Prunus spinosa, Rosa sp., Thymus pulegioides, Trifolium arvense, Trifolium pratense, Veronica spicata

**Condition:** One large flowering tuft, two small and two very small young specimens of *Dracocephalum* have been found. The surface was very overgrown - mowing and light removal of bushes was carried out

Care: Mowing was done on the surface.

**GPS-coordinates:** 59°53'20.81"N 10°44'17.07"E

Top of the hill on the highest part of Bleikøya, close to main footpath.

**Date of watch:** 9, 29.06., 24.08.2021.

Owner:

Photos: R Gramsz



Photo 1. Too much overgrown location Bleikøya 9. 24.08.2021.



Photo 2. Location after mowing. 24.08.2021.



Individuals: ca. 80

**Area:** 5 x 20m, (0.013 ha)

Environment (habitat): Small, dry clearing on the top of a hill surrounded by a small forest and thicket with trees: *Pinus silvestris, Fraxinus excelsior and Acer platanoides*. This clearing itself is partly overgrown by bushes: *Rhamnus cathartica, Berberis vulgaris, Cotoneaster sp., Rosa sp.* And other species: *Achillea millefolium, Agrostis capillaris cfr., Avenastrum pratensis, Calamagrostis arundinacea cfr., Centaurea jacea, Daucus carota, Festuca ovina, Festuca rubra cfr., Fragaria vesca, Fragaria viridis, Filipendula vulgaris, Galium boreale, Galium verum, Geranium sanguineum, Geum urbanum, Hylotelephium telephium ssp. maximum (Sedum telephium = S. maximum), Hypericum perforatum, Lotus corniculatus, Melica nutansn Origanum vulgare, Phydimus spurius (Sedum spurium), Plantago media, Polygonatum odoratum, Prunus spinosa, Thymus pulegioides, Trifolium arvense, Trifolium pratense, Veronica spicata.* 

Height of sward about 30 cm. There are only few places to germination within the patch of *Dracocephalum*, more places to germination are on the slope.

**Condition:** *Dracocephalum* was already after flowering. In the open, central part of location is the biggest concentration of *Dracocephalum* plants - mainly large tufts 15 -35 cm high. Plants are also growing under bushes. The surface is already a bit too overgrown with both bushes and too dense undergrowth.

**Care:** No cutting this year but it should be done in next year.

**GPS-coordinates:** 59°53'22.70"N 10°44'30.00"E

**Date of watch:** 29.06.2021.

Owner:

**Photos:** R. Gramsz



Photo 1. Location Bleikøya 10. Top of the ridge. 29.06.2021.



Photo 2. Tufts are quite high  $15-35 \,\mathrm{cm}$  and already after blooming. 29.06.2021.

# **EKEBERG** – 2021

# Map. Dracocephalum – Ekeberg 2021



< 10 specimens (white)

11 – 100 specimens (yellow)

101 – 300 specimens (red)

> 300 specimens (violet)

**Location: Ekeberg 1 (A)** 



Individuals: ca. 1130

**Area:** 300 x 50 m (1.32 ha)

Environment (habitat): SW and W rocky slop in lower (below Kongsveien) part of Ekebergskråningen Naturreservat. Inclination of slope is between 10° to 50°. There is very shallow soil and bare rock on most of area. Cover of trees and bushes is about 30% so, the location is quite open and sunny. Trees and bushes layers: Berberis vulgaris, Frangula alnus, Fraxinus excelsior, Juniperus communis, Pinus silvatica, Populus tremula, Prunus spinosa, Rhamnus cathartica, Rosa sp. Sorbus sp. div. Other plants: Achillea millefolium, Alium sp., Artemisia campestris, Asplenium trichomanes, Asplenium septentrionale, Asplenium septentrionale x trichomanes, Calluna vulgaris, Campanula rotundifolia, Filipendula vulgaris, Fragaria vesca, Galium verum, Geranium sanguineum, Geum urbanum, Hylotelephium telephium, Hypericum perforatum, Inula salicina, Lotus corniculatus, Origanum vulgare, Polypodium vulgare, Sedum album, Trifolium alpestre, Polygonatum odoratum, Woodsia ilvensis, Viscaria vulgaris.

Condition: Dracocephalum is in full flowering at the time of observation. Plants are well developed 20 - 30 cm and flower profusely - 90%. Only in very sunny places with shallow soil the plants are weak and wilted. (There was no rain for some weeks.)

#### Care:

### **GPS-coordinates:**

Central part of location 59°53'30.50"N 10°45'41.40"E

North edge of location 59°53'35.20"N 10°45'35.50"E

South edge of location 59°53'26.70"N 10°45'46.30"E

**Date of watch:** 12.06.2021.

Owner: Photos: R. Gramsz Observer: R. Gramsz

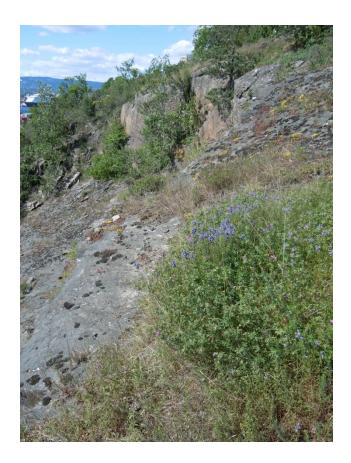


Photo 1. Location Ekeberg 1 – The most northern part of the location. 12.06.2021.



Photo 2. Most of *Dracocehpalum* tufts were flower profusely but were a little wilted. 12.06.2021.

Location: Ekeberg 2 (B) Jomfrubråten



Individuals: ca. 1170

**Area:** 250 x 80 m (1.08 ha)

Environment (habitat): SW and W rocky slop in lower part of Ekebergskråningen Naturreservat(Jomfrubråten, below Kongsveien). Inclination of slope is between 10° to 50°. There is very shallow soil and bare rock on most of area. Trees and bushes cover varies between 30 and 50% so, the location is quite open and sunny, but comparing with location Ekeberg 1 habitat on this site seams more acid. Dominant in tree layer is pine *Pinus sylvestris* and in undergrowth: *Caluna vulgaris* and *Arctostaphylos uwa-ursi*. The rest of plants are similar as in Ekeberg 1.Trees and bushes layers: *Berberis vulgaris, Frangula alnus, Fraxinus excelsior, Juniperus communis, Pinus sylvestris, Populus tremula, Prunus spinosa, Rhamnus cathartica, Rosa sp. Sorbus sp. div. Other plants: <i>Achillea millefolium, Alium sp., Artemisia campestris, Asplenium trichomanes, A. septentrionale, A. septentrionale x trichomanes, Calluna vulgaris, Campanula rotundifolia, Filipendula vulgaris, Fragaria vesca, Galium verum, Geranium sanguineum, Geum urbanum, Hylotelephium telephium, Hypericum perforatum, Inula salicina, Lotus corniculatus, Origanum vulgare, Polypodium vulgare, Sedum album, Trifolium alpestre, Polygonatum odoratum, Woodsia ilvensis, Viscaria vulgaris.* 

**Condition:** *Dracocephalum* is in beginning of flowering at the time of observation. Plants are even higher than in location 1, (30 -40 (50) cm) and flower profusely - 80% but are weak and wilted. (There was no rain for some weeks.)

Care: The cutting of trees and bushes continues on the surface. There is much more *Dracocephalum* in the cuttings in previous years

# **GPS-coordinates:**

Central part of location 59°53'15.70"N 10°45'59.70"E

North edge of location 59°53'21.10"N 10°45'53.60"E

South edge of location 59°53'14.60"N 10°45'01 40"E

**Date of watch:** 12.06.2021 **Photos:** R. Gramsz **Observer:** R. Gramsz

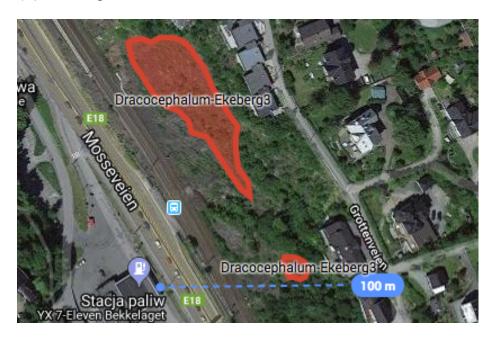


Photo 1. The larges patch with *Dracocephalum* in location Ekeberg 2 – beginning of blooming. 12.06.2021.



Photo 2. *Dracocephalum* grows well in places lit after cutting the bushes. The cut bushes lying in the background should be removed. 12.06.2021.

Location: Ekeberg 3 (C) Bekkelaget



Individuals: ca. 300

**Area:**  $150 \times 50 \text{ m} (0.221 \text{ ha}) + 10 \times 10 \text{ m} (0.012 \text{ ha})$ 

Environment (habitat): Very steep part of SW slope between railway and buildings on Grottanveien. Inclination of slope is 20° to 80°. Trees and bushes cover varies between 30% and 80% in Southern part of this location. Trees and bushes layer: *Acer platanoides, Berberis vulgaris, Frangula alnus, Fraxinus excelsior, Ligustrum vulgare, Pinus sylvestris, Populus tremula, Ribes sp., Rhamnus cathartica, Rosa sp. Sorbus sp. div, Tilia cordata.* Other plants: *Achillea millefolium, Artemisia campestris, Asplenium trichomanes, Asplenium septentrionale, Calluna vulgaris, Campanula rotundifolia, Filipendula vulgaris, Fragaria vesca, Galium verum, Geranium sanguineum, Geum urbanum, Hylotelephium telephium, Hypericum perforatum, Inula salicina, Lotus corniculatus, Origanum vulgare, Polypodium vulgare, Sedum album, Trifolium alpestre, Polygonatum odoratum, Viscaria vulgaris.* 

**Condition:** *Dracocephalum* plants are 20 -30 (50) cm high, in the final stage of flowering. Plants grow in old places, do not occupy new open places after cut bushes.

**Care:** On the surface, clearings of trees and shrubs are carried out, but this does not affect the spread of *Dracocephalum*.

### **GPS-coordinates:**

 Central part of location 59°52'51.96"N
 North edge of location 59°52'53.59"N
 South edge of location 59°52'49.80"N

 10°46'26.78"E
 10°46'24.15"E
 10°46'29.30"E

**Date of watch:** 21.06.2021.

Owner: Photos: R. Gramsz Observer: R. Gramsz



Photo 1. Southernmost site on the location Ekeberg 3. It is overgrown with shoots of cut bushes again. 21.06.2021.



Photo 2. The main part of location, view to the South. 21.06.2021.



**Location: Grefsen 1** 

Individuals: ca. 110

**Area:** 10 x 40 m (0.032 ha) (potential habitat 20 x 80 m)

Environment (habitat): Location is some 10 - 15 m over Grefsenkollenveien on the edge of rocky wall. Part of this site is covered by steel protective net but seams that it not disturbs growth of *Deacocephalum* tufts. Location is surrounded by pine forest with dominating in udergrowth *Calluna vulgaris* and *Vaccinium myrtillus*. On the location grows only small trees and bushes covering ca. 30%. Trees and bushes layer: *Berberis vulgaris*, *Corylus avelana Cotoneaster sp.*, *Daphne mezereum*, *Juniperus communis*, *Pinus sylvestris*, *Populus tremula*, *Prunus avium*, *Rhamnus cathartica*, *Rosa sp. Sorbus aucuparia*, *S. intermedia*. Other plants: *Atocion rupestris*, *Cirsium heterophyllum*, *Convallaria majalis Fragaria vesca*, *Geranium sanguineum*, *G. silvatium*, *Hieracium pilosella*, *Hylotelephium telephium*, *Inula salicina*, , *Lathyrus linifolius*, *Lotus corniculatus*, *Origanum vulgare*, *Polygonatum odoratum*, *Polypodium vulgare*, *Potentilla argentea*, *Rubus saxatilis*, *Sedum album*, *Trifolium pratense*, *Woodsia ilvensis*.

**Condition:** Plants are growing in few concentrations in the edge of precipice over the road, sometimes under steel protective net. *Dracocephalum* plants were in good condition and close to the end of blooming at the time of observation. About 80% were bloomed. Tufts were 20 - 50 (60) cm high.

Care: It is advisable to clear a small amount of trees and shrubs from the surface and its surroundings. (this work can be quite difficult and dangerous due to the location of the surface on the edge of the precipice.)

# **GPS-coordinates:**

North edge of location 59°57'21.0"N 10°47'55.6"E

South edge of location 59°57'20.0"N 10°47'56.3"E

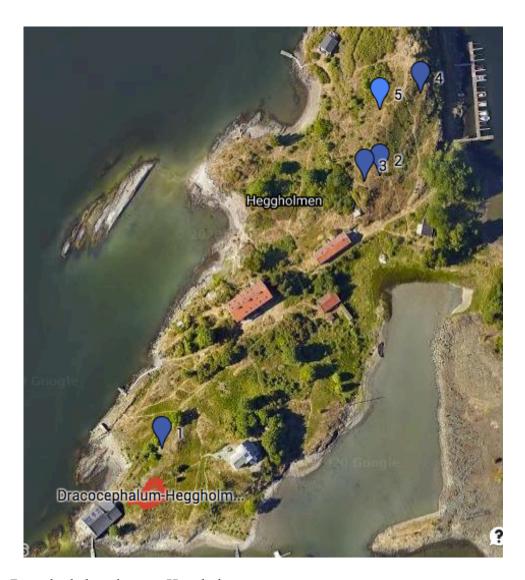
**Date of watch:** 1.07.2021. **Photos:** R. Gramsz **Observer:** R. Gramsz



Photo 1. Location Grefsen 1, View towards North. 1.07.2021.



Photo 2. *Dracocephalum* on location Grefsen 1, view towards South. Plants were in good condition but the flowers were already finishing bloomin. 1.07.2021.



Map 1. Dragehode locations on Heggholmen.

- marked red the old Dragehode location
- marked blue 1,2,3,4. new locations found in 2019.
- marked light blue 5. new location found in 2020.

# New Locations:

```
Location 1. (close to main location) – ca. 20 tufts, 10 - 20 cm high, 80\% blooming Location 2. (Heggholmen Hill) – 7 tufts, 10 - 25 cm high, 100\% blooming Location 3. (Heggholmen Hill) – 2 tufts, 25 cm high, both blooming Location 4. (Heggholmen Hill) – 1 big tuft, 25 cm high, blooming – 3 small, young, vegetative plants
```

# **Location: Heggholmen 1 (old location)**



Individuals: ca. 170

**Area:** ca. 10 x15 m (0.026 ha)

**Environment (habitat):** SW part of the flat top of the hill. In thermophilous vegetation on shallow soil. With: *Fraxinus excelsior, Sobus aucuparia*, (unnecessarily cut) *Rosa sp., Berberis vulgaris* and *Allium vineale, Cotoneaster sp., Filipendula vulgaris, Fragaria vesca, Geranium sanguineum, Hylotelephium telephium ssp. maximum (Sedum telephium = Sedum maximum)Polygonatum odoratun, Sedum album, , Thymus pulegioides, Vincetoxicum rossicum.* 

**Condition:** *Dracocephalum* plants were in full blooming and 10 - 20 cm high. There were 50 tufts on western side of footpath and 120 counted on eastern side. There are also some young vegetative plants. I estimate 80% plants were blooming. This location of *Dracocephalum* seams to be stable but plants grow still on the same area (without expanding).

Care: This area should be moved by motor scythe once every 2 - 3 years after *Dracocephalum* seeds are ripen.

**GPS-coordinates:** 59°52'55.90"N 10°42'42.10"E

SW part of Heggholmen, flat top of the hill and part of slope facing SW.

**Date of watch:** 9,11.06.2021.

Owner:

**Photos:** R. Gramsz



Photo1. Main location on Heggholmen. View on Eastern part. 11.06.2021.



Photo 2. New location "1" with ca. 20 tufts. 9.06.2021.



Photo 3. New location "2" on Heggholmen Hill, with 7 blooming tufts. 9.06.2021.



Photo 4. New location "3" (Heggholmen Hill) with 2 blooming tufts. 9.06.2021.

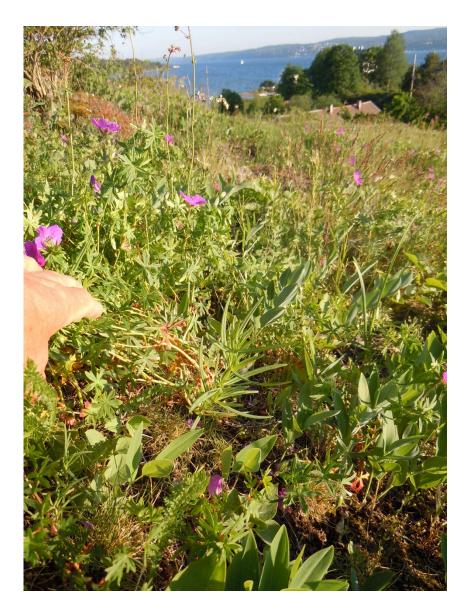


Photo 5. New location "5" (Heggholmen Hill) with 3 young plants. 9.06.2021.

## KILLINGEN – 2021

Map 1. Dracocephalum-Killingen.



< 10 specimens (white)

11 – 100 specimens (yellow)

101 – 300 specimens (red)

**Location: Killingen** 



Individuals: ca. 240

Area: 8 x 10 m. (0.008 ha) Potential habitat: 15m x 80m

**Environment (habitat):** Western part of Killingen. Open area between lawn close to house and rocky coast. Site is slightly bending westwards, sunny, with shallow stony soil. Trees and bushes: *Juniperus communis, Pinus sylvestris, Sorbus aucuparia, Syringa vulgaris, Rosa sp.* (covers less than 10%).

Herbaceous plants and dwarf shrubs: Agrostis capillaris, Anthyllis vulneralia, Artemisia campestris, Avenastrum pubescens Campanula rotundifolia, Carlina vulgaris, Convallaria majalis, Daucus carota, Festuca ovina, Filipendula vulgaris, Fragaria vesca, Galium boreale, Galium verum, Geranium sanguineum, Hypericum perforatum, Melica nutans, Origanum vulgare, Polygonatum odoratum, Pimpinella saxifraga, Poa pratensis s. lato, Rubus sp., Solidago virgaurea, Thymus pulegioides

**Condition:** Plants existed as low tufts or single twigs and grows densely. They are probably twigs growing out of the peripheral edges of old, disintegrating tufts. Average height of tufts was 5 - 15(20) cm. About 70% plats were blooming but it was the end of blooming. There were still few alive plants on the lawn.

Care: Owner of this area is taking care of this *Dracocephalum* location.

**GPS-coordinates:** 59°54'29.80"N 10°39'26.50"E

**Date of watch:** 30.06.2021.

Owner:

Photos: R. Gramsz

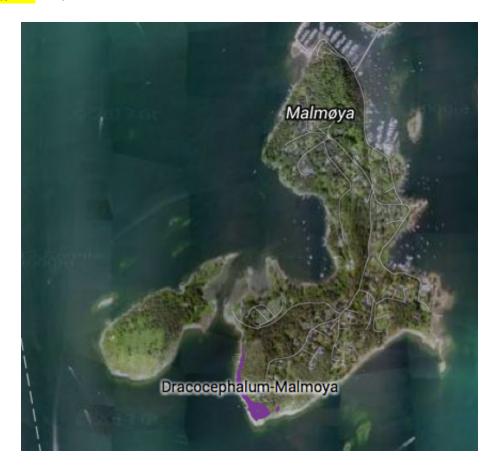


Photo 1. Location Killingen. 30.06.2021.



Photo 2. *Dracocephalum* twigs grow densely without creating visible clumps. 23.06.2021.

# MALMØYA – 2021



< 10 specimens (white)

11 – 100 specimens (yellow)

101 – 300 specimens (red)

Location: Malmøya



Individuals: ca. 580

**Area:**  $400 \times 80 - 20 \text{m} (0.655 \text{ ha} + 0.019 \text{ ha})$ 

Potential habitat: 600 x 100 m (...but there was no *Dracocephalum* on SE cost of Malmøya – checked 22.06.2015)

**Environment (habitat):** South end of Malmøya, deforested hillside sloping South, South – West and West towards the sea. The slope to the west is getting steeper. Habitat is the belt between the forest (with the houses) and devoid of vegetation, rocks over the water. Habitat is fairly homogeneous, open, with single pines, junipers, mountain ashes, barberries. Sward height about 30 cm (mainly *Geranium sanguineum*).

Trees and bushes: *Juniperus communis, Pinus sylvestris, Sorbus aria, Sorbus x hybrida, Rosa sp., Rosa mollis cfr., Cotoneaster scandinavicus cfr.* 

Herbaceous plants and dwarf shrubs: Anthyllis vulneralia, Arctostaphylos uva-ursi, Artemisia campestris, Campanula rotundifolia, Carex digitata cfr., Carlina vulgaris, Convallaria majalis, Epipactis atrorubens, Festuca ovina, Filipendula vulgaris, Galium boreale, Geranium sanguineum, Inula salicina, Melica nutans, Origanum vulgare, Polygala vulgaris, Polygonatum odoratum, Pimpinella saxifraga, Poa pratensis s. lato, Solidago virgaurea. (lack of Thymus pulegioides!!!);

**Condition:** As last years *Dracocphalum* could be found on few concentrations along steep western slope (240), one big concentration in SW part of location (310) and 1 in Eastern part (30). Plants already finished blooming, they were 10 - 20 (25) cm high.

Care: A slight removal of bushes on W slopes and mowing on the main surface would be nice.

#### **GPS-coordinates:**

Central part of location 59°51'42.10"N 10°45'04.20"E

East edge of location 59°51'42.40"N 10°45'10.10"E

North edge of location 59°51'49.70"N 10°45'01.00"E

**Date of watch:** 30.06.2021.

Owner:

**Photos:** R. Gramsz

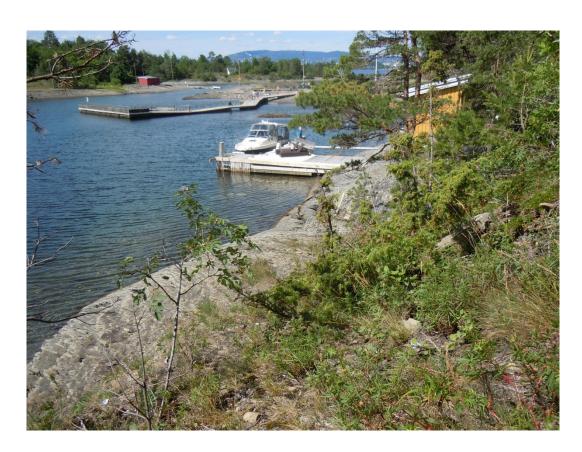


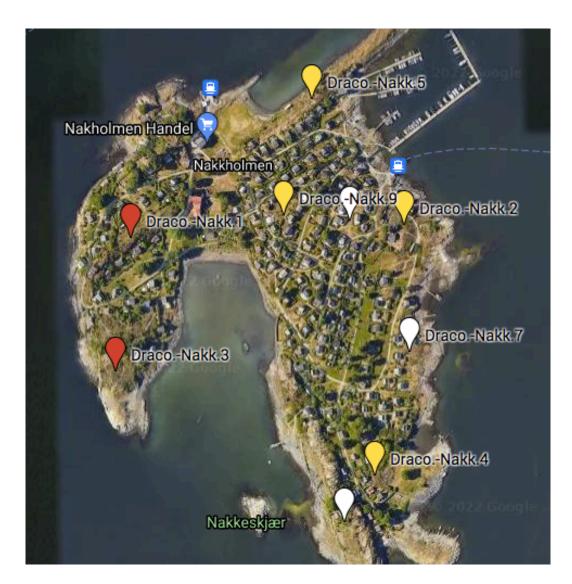
Photo 1. The most NW part of *Dracocephalum* location. 30.06.2021.



Photo 2. Central part of Malmøya location. 30.06.2021.



Photo 3. Eastern part of *Dracocephalum* location on Malmøya. 30.06.2021.



Map. Dracocephalum ruyschiana - Nakkholmen.

< 10 specimens (white)

11 – 100 specimens (yellow)

101 – 300 specimens (red)



Individuals: ca. 240

**Area:** 100 m x 15 m (0.124 ha) + 5 x 5 m (0.004 ha)

**Environment (habitat):** The ridge of a hill partly overgrown by bushes (covering ca. 30% of the area). In thermophilous vegetation on shallow soil, with: *Syringa vulgaris, Fraxinus excelsior, Rosa sp. Cotoneaster sp., Berberis vulgaris, Geranium sanguineum, Dianthus deltoides, Fragaria vesca, Polygonatum odoratum, Verbascum sp, Sedum spurium, Filipendula vulgaris. Dracocephalum* plants can be found in concentrations along a whole top of the ridge. The area of this location has been extended to the South for small concentration behind house no 17.

**Condition:** Location is in very good condition. *Dracocephalum* is in full blooming period and is very well visible in all known concentrations on the ridge. The surface of the cut and chemically treated lilacs looks better, but is still distinguished by the presence of habitat-related foreign and nitrophilic plants.

Care: Group of local people <u>Dragehodegruppa</u> has taken care of this place. They regularly do some cutting on the main area and also herbicidal control of overgrowing lilac bushes. That opens the area and gives more light for already existing *Dracocephalum* plants. Herbicides at last killed lilac in this area but also other characteristic for this habitat species. Seams that is better in that situation only reduce clusters of bushes by cutting hanging branches and possibly shouts – not the whole cluster! And no chemical treatment! It is also important to remove cut vegetation to avoid fertilization of the surface by the decomposition of organic matter.

**GPS- coordinates:** 59°53'23.97"N 10°41'29.46"E

Stony hill in the central part of W side of the island.

**Date of watch:** 10.06.2021.

Owner:

**Photos:** R.Gramsz



Photo 1. Top of the hill, area after cutting and chemical treatment of lilac bushes. 10.06.2021.



Photo 2. Location Nakkholmen , concentration behind house no 17. 10.06.2021.



Photo 3. Site in NE part of location 1. 10.06.2021.



Individuals: ca. 95

**Area:** ca. 10 x 15 m, 0.019 ha (potential area 20 x 50 m

Environment (habitat): Open NE slope of a small hill. In thermophilous vegetation with Geranium sanguineum on shallow soil. With: Geranium sanguineum, Filipendula vulgaris, Arctostaphylos uva-ursi, Hylotelephium telephium ssp. maximum (Sedum telephium = Sedum maximum), Syringa vulgaris, Rosa sp., Berberis vulgaris, Sorbus aucuparia x, Cotoneaster sp. (cult. - lucidus? scandinavicus?), Sedum spurium, Festuca (ovina agg.?), Galium boreale, Thymus sp, Fragaria vesca, Plantago media, Veronica spicata, Polygonatum odoratum, Convallaria majalis. Rubus Saxatilis

**Condition:** Location looks O.K. *Dracocephalum* plants were 15 - 20 cm high and about 80% blooming.

Care: Seams that location becomes richer in vegetation – it should be mowed every 2-3 years and all cut vegetation removed from the location.

**GPS-coordinates:** 59°53′24.43″N 10°41′48.97″E

Open NE slope of a small hill, close to the shore, 100 m S from the harbour, over the compost deposit. (+ 1 tuft noticed 30m West from main location, close to footpath)

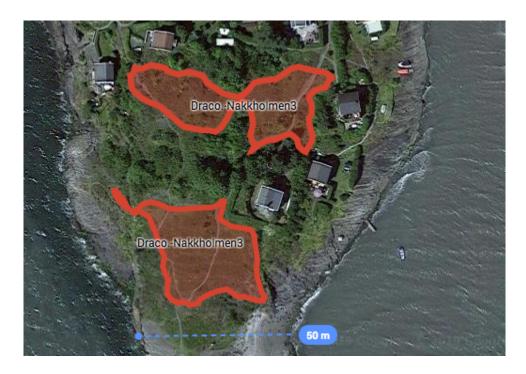
**Date of watch:** 10.06.2021.

Owner:

**Photos:** R. Gramsz



Photo 1. General view over location Nakkholmen 2. 10.06.2021.



**Individuals:** ca. 260 (105 in N part + 155 in S part)

**Area:** whole area ca.  $80 \times 100 \text{ m}$ , 2 parts: 0.123 ha + 0.135 ha

Environment (habitat): The ridge and slopes of a hill partly overgrown by bushes. In thermophilous vegetation with: *Geranium sanguineum on shallow soil. With: Sorbus acuparia, S. intermedia, Cotoneaster sp., Rosa sp., Ligustrum vulgare, Syringa vulgaris, Lycium barbarum, Berberis vulgaris, Pinus silvaticus, Filipendula vulgaris, Sedum spurium, Hylotelephium telephium ssp. maximum (Sedum telephium = Sedum maximum), Geranium sanguineum, Thymus sp., Origanum vulgare, Plantago media, Fragaria vesca, Campanula persicifolia, Polygonatum odoratum.* 

**Condition:** Location was dry, but *Dracocephalum* plants were in good condition. Usually 20 - 25 (30) cm high, about 80% were blooming and it was a full blooming period.

**Care:** It is recommended to mow this location every 2-3 years and all cut vegetation removed from the location.

**GPS-coordinates:** 59°53'19.20"N 10°41'28.40"E

Stony hill in the southern peninsula of the W side of the island.

**Date of watch:** 10.06.2021.

Owner:

**Photos:** R. Gramsz **Observer:** R. Gramsz



Photo 1. Southern part of the location Nakkholmen 3. 10.06.2021.



Photo 2. Northern part of the location Nakkholmen 3. 26.06.2018.



**Individuals:** ca. 45 (40 + 5)

**Area:**  $10 \times 6m$ ,  $0.015 \text{ ha} + 4 \times 3m$ , 0.002 ha (potential area  $40 \times 50 \text{ m}$ )

**Environment (habitat):** Small hill partly overgrown by bushes (mainly *Syringa vulgaris*). In thermophilous vegetation on shallow soil. With: *Geranium sanguineum*, *Thymus pulegioides*, *Filipendula vulgaris*, *Fragaria vesca*, *Cotoneaster sp*.

**Condition:** Location was quite dry but *Dracocephalum* plants look good and were found in both places: – on the main site located close to fence of a house no.168 - and another small one about 10 m to the North-East, along edge of lilac bushes. Plants on the main location were well blooming – ca. 80% but 5 tufts in a smaller area sparsely flower.

Care: Lilac shouts are overgrowing this location - it is important to remove them. This work can be made relatively easily with a brushcutter (ryddesag) with a steel knife. It is not recommend the use of herbicides here.

**GPS-coordinates:** 59°53'15.47"N 10°41'46.87"E

**Date of watch:** 10.06.2021.

Owner:

Photos: R. Gramsz



Photo 1. Main area of location Nakkhomen 4. 10.06.2021.



Photo 2. Smaller site of location 4 is overgrown with lilac shoots. 10.06.2021.



Individuals: ca. 75

**Area:** ca. 15m x 60m, 0.055 ha

**Environment (habitat):** Top of the ridge and NW slope of a hill partly overgrown by bushes from surroundings of a house no 182 to the toilet building. There is a great influence of human presence but *Dracocephalum* plants are growing even on the edges of flowerbeds in gardens. In thermophilous vegetation with *Geranium sanguineum* on shallow soil. With: *Syringa vulgaris, Rosa sp., Filipendula vulgaris, Sedum spurium (Phedimus spurius), Hylotelephium telephium ssp. maximum (Sedum telephium = Sedum maximum), Geranium sanguineum, Thymus sp., Origanum vulgare, Plantago media, Polygonatum odoratum.* 

**Condition:** Location looks good. *Dracocephalum* plants were 10 - 20(40) cm high and about 80% were blooming. It was the full blooming period.

**Care:** Seams that this location is the main place of interest of <u>Dragehodegruppa</u>. Most of *Dracocephalum* concentrations are fence with rope and/or mark with sticks. Local people also do all bushes catting - maybe too much as in dry and hot years *Dracocephalum* would better grow in light shadow.

**GPS-coordinates:** 59°53'28.93"N 10°41'42.38"E

A middle part of a long ridge sticks out as a peninsula in NE part of island.

**Date of watch:** 10.06.2021.

Owner:

**Photos:** R.Gramsz



Photo 1. Main part of location 5. 10.06.2021.

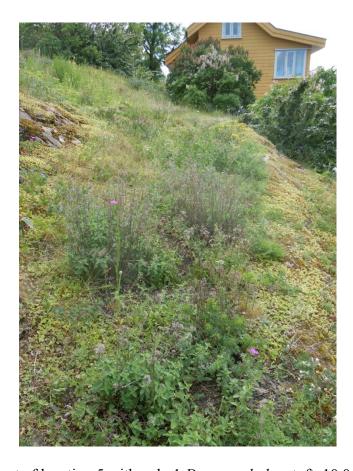


Photo 2. Northern part of location 5 with only 1 Dracocephalum tuft. 10.06.2021.



**Individuals:** 9

**Area:** ca. 15 x 35 m, 0.045 ha (potential area ca. 30 x 100 m)

Environment (habitat): Western slope of a rocky ridge on the southernmost peninsula in Nakkholmen. Location is without trees and about 10% of bushes cover. With: Berberis vulgaris, Cotoneaster sp., Fraxinus excelsior, Rosa sp., Rhamnus catharticus. Sorbus aucuparia, Syringa vulgaris. In thermophilous vegetation with Geranium sanguineum and Filipendula vulgaris on shallow soil and: Leucanthemum vulgare, Sedum acre, S. spurium (Phedimus spurius), Hylotelephium telephium ssp. maximum (Sedum telephium = Sedum maximum), Thymus sp., Origanum vulgare, Plantago media, Polygonatum odoratum, Lotus corniculatus, Hesperis matronalis

**Condition:** Location looks good *Dracocephalum* plants were 15–20 cm high, all blooming and growing only in 2 concentrations (4 + 5 tufts). On the location I found a concentration of *Vincetoxicum rossicum*.

**Care:** The entire surface would be useful to mow every 2-3 years and pay special attention to eliminate cluster of *Vincetoxicum rossicum* before it spreads more.

**GPS-coordinates:** 59°53'13.8"N 10°41'44.7"E

**Date of watch:** 10.06. 2021.

**Owner:** 

Photos: R. Gramsz



Photo 1. Location 6, the view from the bench placed here. Cluster of *Vincetoxicum rossicum* is to the right of the visible trees. 10.06.2021.



Photo 2. Place of concentration of *Vincetoxicum rossicum* with already removed plants. 10.06.2021.



**Individuals:** 5

**Area:** 2 x 5 m, 0.001 ha (potential area ca. 10 x 15 m)

**Environment (habitat):** Small area among summer houses which is kept "wild" – with thermophilous vegetation on shallow soil.

Condition: 3 blooming + 2 vegetative tufts, 15 - 20 cm high were found.

**GPS-coordinates:** 59°53'19.9"N 10°41'49.3"E

**Date of watch:** 10.06.2021.

Owner: Photos: R. Gramsz Observer: R. Gramsz



Photo 1. *Dracocephalum* location 7. 10.06.2021.



Individuals: not found

**Area:** 2 x 4 m, 0.002 ha

**Environment (habitat):** Small area of not mowed lawn among summerhouses.

**Condition:** 

Care

**GPS-coordinates:** 59°53'24.6"N 10°41'45.1"E

**Date of watch:** 10.06. 2021.

Owner: Photos: no photo Observer: R. Gramsz



**Individuals: 32** 

**Area:** 8 x 10m, 0.009 ha (potential area ca. 20 x 40 m)

Environment (habitat): small ridge with termophilous vegetation on the middle of island surrounded by summerhouses. With: Syringa vulgaris (as hedge), Cotoneaster sp., Fraxinus excelsior, Rosa sp. and Geranium sanguineum, Filipendula vulgaris, Leucanthemum vulgare, Sedum acre, S. spurium (Phedimus spurius), Hylotelephium telephium ssp. maximum, Thymus sp., Origanum vulgare, Plantago media, Polygonatum odoratum, Lotus corniculatus, Silene nutans...

**Condition:** *Dracocephalum* plants were in good condition, 15 -20(30) cm ca. 80% were blooming.

Care

**GPS-coordinates:** 59°53'24.8"N 10°41'40.4"E

**Date of watch:** 10.06.2021.

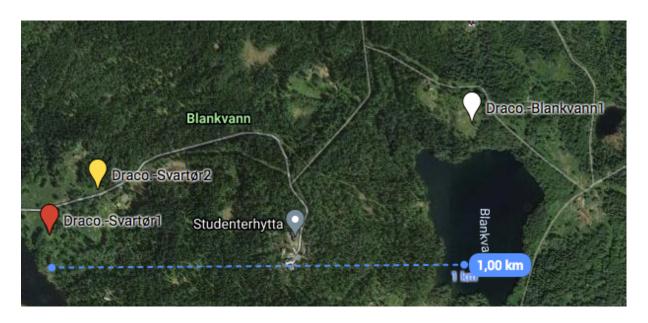
**Owner:** 

**Photos:** R. Gramsz



Photo 1. Site with *Dracocephalum* plants on Location 9. 10.06.2021.

## NORDMARKA – 2021



 ${\bf Map.}\ .\ {\it Dracocephalum\ ruyschiana-Nordmarka.}$ 

< 10 specimens (white)

11 – 100 specimens (yellow)

101 – 300 specimens (red)

**Location: Svartor 1** 



Individuals: ca. 175

**Area:** ca. 50 x 20 m, 0.029 ha

Environment (habitat): On a small dry rocky hill, surrounded by bushes and young trees (main concentration), and spread in the neighboring part of the meadow. With: Achillea millefolium, Agrostis capillaris, Agrostis vulgaris, Alchemilla sp., Briza media, Campanula rotundifolia, Carex pallescens, Convallaria majalis, Dactylis glomerata, Filipendula vulgaris, Filipendula ulmaria, Fragaria vesca, Fraxinus excelsior, Galium boreale, Galium verum, Geranium sylvaticum, Holcus lanatus, Hypericum perforatum, Hypochoeris maculata, Juniperus communis, Knautia arvensis, Lathyrus vernus, Leucanthemum vulgare, Phleum pratense, Pimpinella saxifraga, Plantago media, Primula veris, Prunus padus, Ranunculus acris, Rosa sp., Rubus sp., Solidago virgaurea, Sorbus aucuparia, Thymus pulegioides, Trifolium alpestre, Trifolium pratense, Vicia cracca

**Condition:** 19 small tufts and individual twigs were found within a meadow. The rest of the *Dracocephalum* grows in clusters on a rocky hill - the main site of location. Plants were 10 - 20 cm high and 80% were blooming.

**Care:** Vegetation, on the surface with *Dracocephalum* should be mowed at the end of August / September and the mown biomass should be removed from the surface.

**GPS-coordinates**: 60° 1'31.32"N 10°38'51.99"E

The main site is situated ca. 150 m E from Svartor farm on a former footpath to E side of Setertj.

**Date of watch:** 2.07.2021.

**Owner:** 

**Photos:** R. Gramsz



Photo 1. Top of rocky hill - main area on location Svartør 1. 2.07.2021.



Photo 2. Blooming sprouts of *Dracocephalum* were maximum to 15-20 cm high. 2.07.2021.

**Location: Svartør 2** 



Individuals: ca. 20

**Area:** 2 x 3 m, 0.001 ha

**Environment (habitat):** On a very small, dry, rocky hill on a side of a meadow. With: *Picea excelsa, Populus tremula, Rosa sp., Sorbus aucuparia, Salix caprea, Prunus padus, Convallaria majalis, Polygala sp., Geranium sanguineum, Thymus pulegioides, Fragaria vesca, Melampyrum sylvaticum, Galium boreale, Hypericum maculatum. The forest near the site was cut in winter 2020/2021. The site is better lit and the large open area around it gives the possibility of spreading <i>Dracocephalum*.

**Condition:** Plants are 10 - 22 cm high and flowering is not very profuse. Old, decaying tufts grow in only one cluster on an area of 1 x 2 m. Location is heavily overgrown by *Convallaria majalis*.

Care: I uproot most of the *Convallaria majalis* from the locations (without pulling out their rhizomes).

**GPS-coordinates:** 60° 1'34.85"N 10°38'59.56"E

Site is situated just opposite Framstua, on NW side of the road.

**Date of watch:** 22.06, 2.07.2021.

**Owner:** 

Photos: R. Gramsz

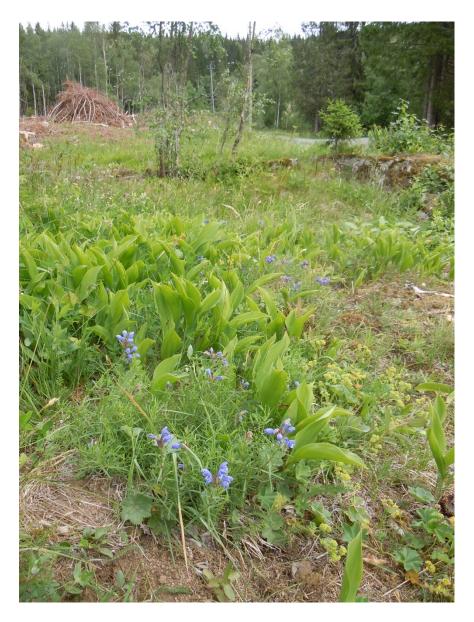


Photo 1. Location Svartør 2. In the background, there is an open space of a cleared forest. On the surface, quite a lot of *Convallaria majalis*. Later *Convallaria majalis* were uprooted. 2.07.2021.

### NORDMARKA, Blankvann - 2017

**Location: Blankvann 1** 



Individuals: not found

**Area:** 2 x 3 m, 0.001 ha

Environment (habitat): On a south facing, open hill slope over a Blankvan lake. With a reach calciphilous vegetation. Among other: Acer platanoides, Achillea millefolium, Agrostis capillaris, Alchemilla sp., Anemone nemorosa, Antennaria dioica, Anthericum liliago, Anthoxanthum odoratum, Aruncus dioicus, Betula pubescens, Briza media, Calamagrostis arundinacea, Campanula rotundifolia, Campanula persicifolia, Convallaria majalis, Dryopteris filix-mas, Epilobium angustifolium, Epipactis atrorubens, Fragaria vesca, Filipendula vulgaris, Galium boreale, Galium verum, Geranium sylvaticum, Gymnadenia conopsea, Hepatica nobilis, Hieracium sect. hieracium, Hylotelephium telephium, Iris sibirica, Lapsana communis, Leucantemum vulgare, Lilium martagon, Listera ovata, Melampyrum pratense, Orthilia secunda, Pinus sylvestris, Platanthera chlorantha, Polygala vulgaris, Potentilla erecta, Pyrola minor, P. rotundifolia, Rubus saxatilis, Solidago virgaurea, Sorbus aucuparia, Stachys sylvatica, Trifolium pratense, Vaccinium myrtillus, Vaccinium vitis-idaea, Vicia sp., Viola sp., Viscaria vulgaris

**Condition:** *Dracocephalum* has not been found in a tall grass.

Care:

**GPS-coordinates:** 60° 1'40.10"N 10°39'58.30"E

About 50 m below a cottage in the direction to Tryvannshogda.

**Date of watch:** 22.06.2021.

**Owner:** 

**Photos:** no photo