<u>Dracocephalum ruyschiana – 2016</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 cm² as an individual.

Old desintegrating tufts are counted as more than one individual if it covers more than 25 cm².

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 – 2016



Location: Bakkehaugen

Individuals: ca. 40

Area: $5 \times 10 \text{ m} + 2 \times 2 \text{ m}$ (potential area $20 \times 100 \text{ m}$)

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. This year except main concentration in the middle of the ridge two tufts were notice 10-15 m closer to white fence. It was a full blooming period but *Dracocephalum* individuals were blooming poorly with only few sprouts. Usually sprouts were 15 - 20 cm high (30 cm – the highest). About 50% were blooming.

Care:

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

Date of watch: 18.06.2016.

Owner:

Photos: R. Gramsz



Photo 1. Bakkehaugen, main site of *Dracocephalum ruyschiana*. 18.06.2016.



Photo 2. *Dracocephalum* on site closer to white fence. 18.06.2016.

BLEIKØYA - 2016



Map. Dracocephalum ruyschiana - Bleikøya.

< 10 specimens (white)

11 – 100 specimens (yellow)

101 – 300 specimens (red)

> 300 specimens (violet)



Individuals: 400

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 20 big 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: Site is in good condition but all vegetation is low and *Dracocephalum* is already after blooming period (very early). There was possible to notice small activity of nesting geeses but the main reason of low vegetation and very early and pure blooming was very hot and dry weather in the end of May. About 50% of plants were blooming and fruiting.

Care: This location has not been mowed this year.

Date of watch: 22.06.2016.

Owner:

Photos: R. Gramsz



Photo 1. Top and S hill slope on Bleikøya 1. 22.06.2016.



Photo 2. It was already end of blooming period. *Dracocephalum* in NE part of location "1". 22.06.2016.



Individuals: ca. 210

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: Site is in rather pure condition, all vegetation is low and there is much less plants. About 180 individuals noticed on main part and about 30 on lower terrace. Only 20 -30% were blooming. There were about 30% young, small vegetative plants (?). Either plants were eaten by gooses or (and) started to grow in the middle of June after hot, dry period.

Care: This location has not been mowed this year.

Date of watch: 22.06.2016.

Owner:

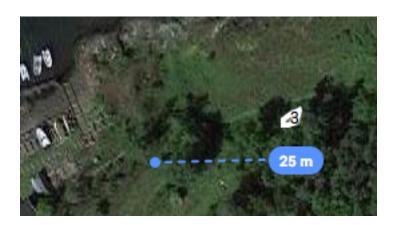
Photos: R. Gramsz, Observer: R. Gramsz



Photo 1. Top of a ridge on location Bleikøya 2. 22.06.2016.



Photo 2. Eastern part of location Bleikøya 2, below the main area. 22.06.2016.



Individuals: 3 (on rocky ledge)

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: Only 3 vegetative tufts were found on rocky ledge.

Care:

GPS-coordinates: 59°53'24.40"N 10°44'26.22"E <u>Dracocephalum-Bleikoya3</u>

Under a footpath on the northern side of a place for boat storage in winter and a new concentration 50 m to the North.

Date of watch: 22.06.2016.

Owner:

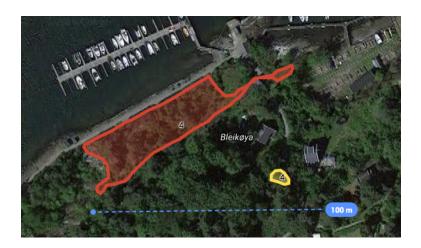
Photos: R. Gramsz



Photo 1. Part of location Bleikøya 3 close to the boat storage place. *Dracocephalum* not notice. 22.06.2016.



Phot.2. Part of location Bleikøya 3 on the rocky ledge. Only 3 individuals. 22.06.2016.



Individuals: ca. 200

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 60%). 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: It was fewer plants they were smaller and in the end of blooming period at the moment of counting. 50 - 70% individuals were blooming but rather sparingly. Anyway this location, comparing with other in Bleikøya was in quite good condition.

Care: Only shoots on the same area as last year have been cut once – in the beginning of September.

Date of watch: 22.06.2016.

Owner:

Photos: R. Gramsz

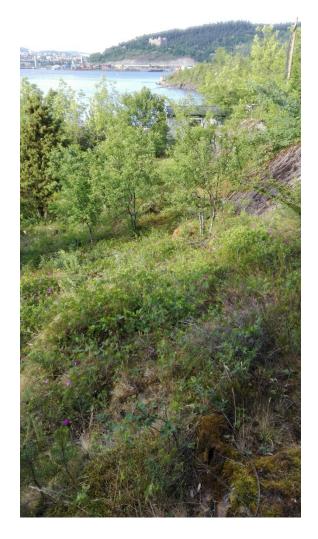


Photo 1. The main part of location Bleikøya 4. 22.06.2016.



Photo 2. Separate concentration, East from main location Bleikøya 4. 22.06.2016.



Individuals: ca.85

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 fewer plants they were dry and small and after blooming period. Only 50 individuals grows along top of ridge and 35 on E slope.

Care: Quite big activity of "rats" *Arvicola terrestris* was notice this year.

(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.)

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

Date of watch: 22.06. 2016.

Owner:

Photos: R. Gramsz



Photo 1. Top of a hill with war monument. Only few remaining blooming plants. 22.06.2016.



Photo 2. SE facing slope on location Bleikøya 5. 22.06.2016.

Bleikøya 6a



Individuals: Ca. 120

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: It was the end of blooming at the time of observation and plants were small and not more than 50% were blooming.

Care: Cutting of lilac shouts were done this year once in the beginning of September.

GPS-coordinates: 59°53'16.97"N 10°44'5.59"E <u>Dracocephalum-Bleikoya6</u>

Date of watch: 22.06.2016.

Owner:

Photos: R. Gramsz



Photo1. View over location Bleikøya 6a. 22.06.2016.

Location: Bleikøya 6 B

Individuals: not found

Area: 1 m²

Environment (habitat): In the private garden on the edge of the bushes.

Condition: Only dry last year shoots were found.

Care:

GPS-coordinates: 0597083/6640195

Under the cottage no 88 (blue), towards the sea, ca. 30 m S from location 6a.

Date of watch: 22.06.2016.

Owner:

Photos: R. Gramsz



Photo 1. Last year location of *Dracocephalum* plants overgrown by *Phedimus spurius*. 22.06.2016.



Individuals: Ca. 115

(about 70 on the main concentration -5×10 m)

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* plants were after blooming period. Plants were small – tufts up to 20 cm.

Care: Cutting of bushes shoots were done in September only on the NW facing rocky ledge. Small area of lilac shoots on main part of location should be hand picked by local people.

GPS-coordinates: 59°53'16.23"N 10°44'2.88"E Dracocephalum-Bleikoya7

Date of watch: 22.06.2016.

Owner:

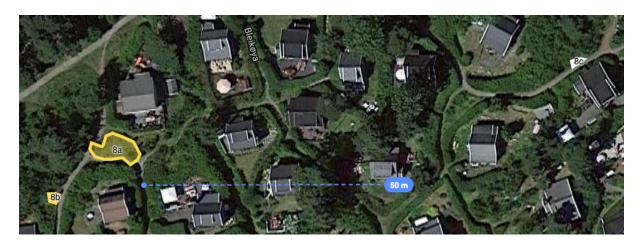
Photos: R. Gramsz



Photo 1. View over main part of location Bleikøya 7. 22.06.2016.



Photo 2. Plants were after blooming period and smaller than last year. 22.06.2016.



Individuals: ca. 49 (35+11+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: It was the end of blooming at the time of observation and plants were small and not more than 50% were blooming in Bleikøya 8A (bigger patch -35 specimens). Plants on location Bleikøya 8B (smaller patch -11 specimens) are very small, hardly visible. 8C-3 individuals, 1 bloomig.

Care: Some shoots of trees and bushes were cut – in September.

GPS-coordinates: 59°53'20.62"N 10°44'22.02"E Dracocephalum-Bleikoya8

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

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

Dracocephalum-Bleikoya8c

Date of watch: 22.06.2016.

Owner:

Photos: R. Gramsz



Photo1. Location Bleikøya 8a - bigger place, close to toilet. 22.06.2016.



Photo 2. Location Bleikøya 8b - smaller place. 22.06.2016.



Photo 3. Location Bleikøya 8c. 22.06.2016.



Individuals: 4

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: Only 4 plants with 1 blooming were found on the ridge. Nothing in open area close to the footpath.

Care:

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

Date of watch: 22.06.2016.

Owner:

Photos: R.Gramsz

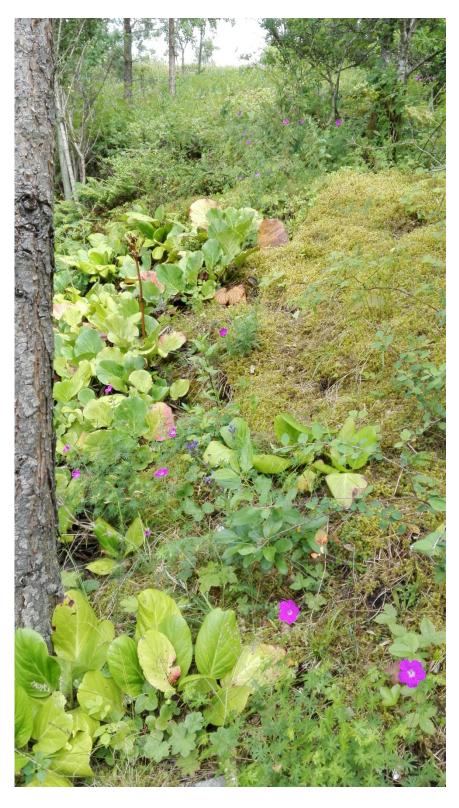


Photo 1. Only one blooming *Dracocephalum* on location Bleikøya 9. 22.06.2016.



Individuals: 115

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: Plants were small but 70% were sparingly blooming. Comparing with other locations on Bleikøya they were in quite good condition. Concentration of *Dracocephalum* on top of the ridge consist of 105 individuals, two concentrations in N slope (5) and NE slope (5).

Care: Light clearing of bushes and cutting of few pines and ashes have been done in September.

Date of watch: 22.06.2016

Owner:

Photos: R. Gramsz



Photo 1. Location Bleikøya 10. 22.06.2016



Photo 2. Main part of location, too much overgrown by bushes. 22.06.2016.

EKEBERG – 2016

Map. Dracocephalum – Ekeberg 2016



< 10 specimens (white)

11 – 100 specimens (yellow)

101 – 300 specimens (red)

> 300 specimens (violet)

Location: Ekeberg 1 (A)



Individuals: ca. 950

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: After long dry period and some very hot days in the end of May and beginning of June *Dracocephalum* is already finishing blooming at the time of observation. Plants were low, delicate and ca. 50% of them were very sparsely blooming.

Care: Some people are building more or less temporary shelters and also cause littering.

GPS-coordinates:

Central part of location 59°53'30.50"N 10°45'41.40"E <u>Dracocephalum-Ekeberg1</u>

North edge of location 59°53'35.20"N 10°45'35.50"E <u>Dracocephalum-Ekeberg1(N)</u>

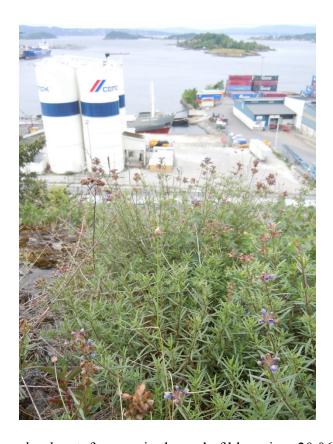
South edge of location 59°53'26.70"N 10°45'46.30"E Dracocephalum-Ekeberg1(S)

Date of watch: 20.06.2016

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



Photo 1. One of *Dracocehpalum* concentrations on location Ekeberg 1. 20.06.2016.



Phot.2. Most of *Dracocehpalum* tufts were in the end of blooming. 20.06.2016.

Location: Ekeberg 2 (B) Jomfrubråten



Individuals: ca. 830

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: In this location *Dracocephalum* is a little better developed than in Ekeberg 1. It is almost the same number of individuals like last year and 50 - 70% plants were blooming. I also noticed, as last year, some big tufts – to 60 cm high but with not so many blooming sprouts. It was the end of blooming.

Care: "Settlement" of temporary shelters has been liquidated.

GPS-coordinates:

Central part of location 59°53'15.70"N 10°45'59.70"E Dracocephalum-Ekeberg2

North edge of location 59°53'21.10"N 10°45'53.60"E Dracocephalum-Ekeberg2(N)

Date of watch: 29.06.2016

Owner:

Photos: R. Gramsz

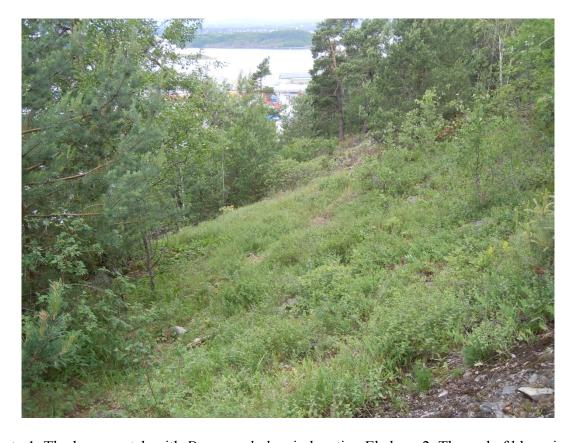


Photo 1. The larges patch with *Dracocephalum* in location Ekeberg 2. The end of blooming. 29.06.2016.

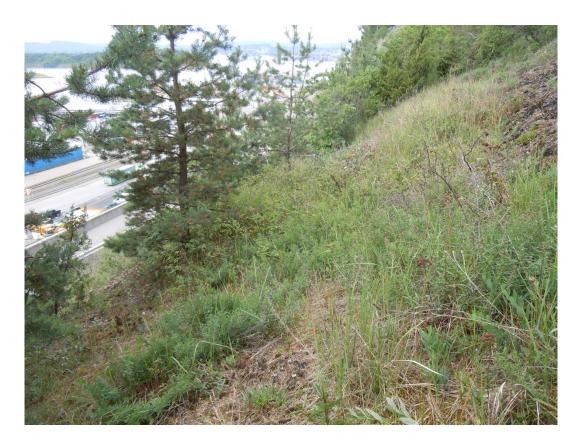


Photo 2. *Dracocephalum* were at the end of blooming in most of sites on this location. 29.06.2016.



Photo 3. Remains of a "settlement" of temporary shelters on location Ekeberg 2. 29.06.2016.

Location: Ekeberg 3 (C) Bekkelaget



Individuals: ca. 320

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: Location looks dry as Ekeberg 1. Quite big *Dracocephalum* tufts (40 -50 cm) are still growing at the southernmost concentration but are very slender and sparsely blooming. Not more than 50% plants were blooming.

Care:

GPS-coordinates:

Central part of location 59°52'51.96"N 10°46'26.78"E <u>Dracocephalum-Ekeberg3</u>

North edge of location 59°52'53.59"N 10°46'24.15"E <u>Dracocephalum-Ekeberg3(N)</u>

South edge of location 59°52'49.80"N 10°46'29.30"E Dracocephalum-Ekeberg3(S)

Date of watch: 19.06.2016

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

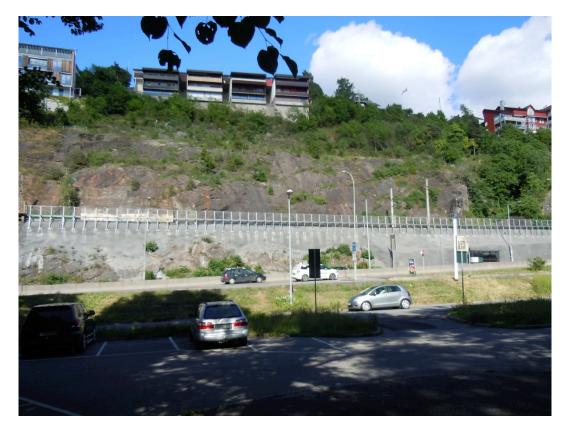
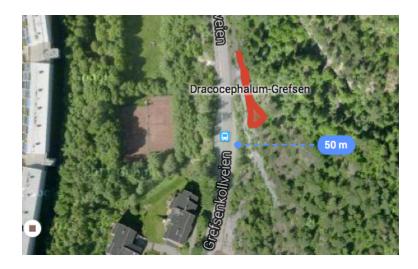


Photo 1. Location Ekeberg 3 from parking lot opposite Shell petrol station. 19.06.2016.



Photo 2. Central part of location. Most of *Dracocephalum* plants finished blooming 19.06.2016.



Location: Grefsen 1

Individuals: ca. 150

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: *Dracocephalum* plants were at the end of blooming. 70% of them were blooming. They are growing in few concentrations in the edge of precipice over the road, sometimes under steel protective net. Dracocephalum tufts were big 20 - 40 (50) cm.

Care:

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: 29.06.2016.

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



Photo 1. Dracocephalum on location Grefsen 1, View towards South. 29.06.2016.



Photo 2. *Dracocephalum* on location Grefsen 1, view towards North with last blooming plants. 29.06.2016.

HEGGHOLMEN – 2016



Location: Heggholmen 1

Individuals: ca. 250

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, Rosa sp.* 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 long after blooming period. There were 66 tufts on western side of footpath and 182 counted on eastern side. *Dracocephalum* plants grow there compacted and there was also a good deal of young/vegetative individuals. I estimate 70% 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 3 - 4 years after *Dracocephalum* seeds are ripen. The area was last moved in August 2014.

GPS-coordinates: 59°52'55.90"N 10°42'42.10"E <u>Dracocephalum-Heggholmen1</u>

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

Date of watch: 20.07.2016.

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



Photo1. General view of location on Heggholmen. 20.07.2016.



Photo 2. Main part of location, *Dracocephalum* after blooming. 20.07.2016.

KILLINGEN – 2016

Map. Dracocephalum-Killingen



< 10 specimens (white)

11 – 100 specimens (yellow)

101 – 300 specimens (red)

> 300 specimens (violet)

Location: Killingen



Individuals: ca. 235

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 were in good condition in the end of blooming period. The average height of tufts was 20 - 25 cm. About 70% tufts were blooming. Some 25 young/vegetative individuals were noticed on frequently mowed lawn adjacent to the *Dracocephalum* location. So, seams that *Dracocephalum* is expanding towards lawn, not to wild surrounding.

Care: Owner of this area is sometimes watering *Dracocephalum* location together with his lawn

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

Date of watch: 28.06.2016.

Owner:

Photos: R.Gramsz



Photo 1. Killingen location on the margin of lawn. 28.06.2016.



Photo 2. *Dracocephalum* is expanding some 2 m inside frequently mowed lawn. 28.06.2016.

MALMØYA – 2016



< 10 specimens (white)

11 – 100 specimens (yellow)

101 – 300 specimens (red)

> 300 specimens (violet)

Location: Malmøya



Individuals: ca. 540

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: Plants were small (the average height of blooming tufts was 15-20 cm. see photo 3) and ca. 50% were blooming sparsely. It was end of blooming period. As last year *Dracocphalum* could be found on 3 concentrations on steep western slope, one big concentration in SW part of location and 1 in Eastern part. Much less plants were noticed this year.

(Except the weather conditions and real (less) number of plants, when they are small and not blooming is much more difficult to notice them using the same method, time and effort while counting.)

Care:

GPS-coordinates:

Central part of location 59°51'42.10"N 10°45'04.20"E <u>Dracocephalum-Malmoya</u>

East edge of location 59°51'42.40"N 10°45'10.10"E <u>Dracocephalum-Malmoya(E)</u>

North edge of location 59°51'49.70"N 10°45'01.00"E <u>Dracocephalum-Malmoya(NW)</u>

Date of watch: 19.06.2016

Owner:

Photos: R. Gramsz



Photo 1. Central part of location with the biggest concentration of *Dracocephalum* but hardly visible as plants are small and sparsely blooming. 19.06.2016.



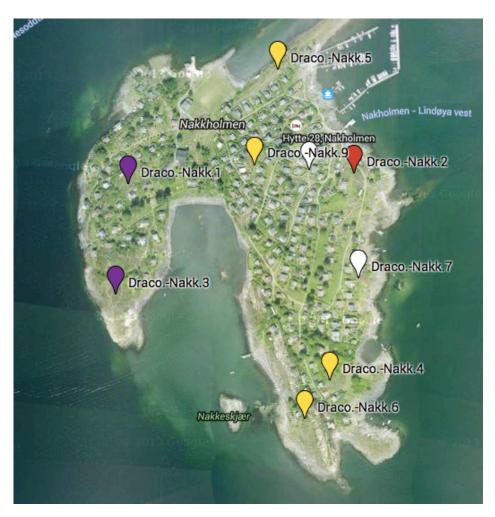
Photo 2. Small concentration in North part of Malmøya location. 19.06.2016.



Photo 3. Dracocephalum plants are smaller than last year and sparsely blooming. 19.06.2016.

NAKKHOLMEN – 2016

Map. Dracocephalum ruyschiana - Nakkholmen.



< 10 specimens (white)

11 – 100 specimens (yellow)

101 – 300 specimens (red)

> 300 specimens (violet)



Individuals: ca. 310

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: *Dracocephalum* plants are small and sparsely blooming, about 60%. End of blooming period. Best looking were plants growing under bushes but they were without flowers.

Care: Group of local people <u>Dragehodegruppa</u> has taken care of this place for a few years. 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. This place is overgrown now by toll grass, and thicket of *Myosotis arvensis*, *Stellaria graminea*, *Potentilla argentea*, *Geranium robertianum*...

GPS- coordinates: 59°53'23.97"N 10°41'29.46"E Dracocephalum-Nakkholmen1

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

Date of watch: 21.06.2016

Owner:

Photos: R.Gramsz



Photo 1. Location Nakkholmen 1 on top of the hill. 21.06.2016.

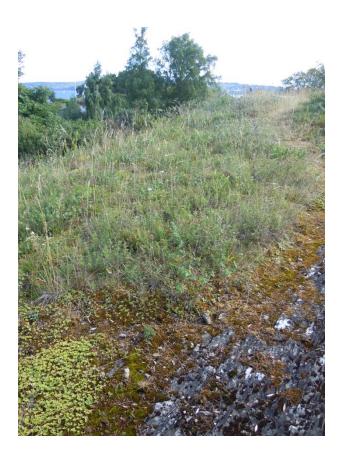


Photo 2. Site in NE part of location 1. End of sparsely blooming. 21.06.2016.



Photo 3. Southernmost site of location 1. 21.06.2016.



Photo 4. Area after cutting and chemical treatment of lilac bushes. 21.06.2016.



Individuals: ca. 135

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: *Dracocephalum* are in the end of sparsely blooming. Plants were small and about 30 - 50% booming. As last year quite a few young specimens were noticed on this location.

Care: Dragehodegruppa takes care of *Dracocephalum* on Nakkholmen.

GPS-coordinates: 59°53'24.43"N 10°41'48.97"E Dracocephalum-Nakkholmen2

Open NE slope of a small hill, close to the shore, 100 m S from the harbour, over the compost deposit.

Date of watch: 21.06.2016.

Owner:

Photos: R. Gramsz



Photo 1. General view over location Nakkholmen 2. 21.06.2016.



Photo 2. Only few blooming specimens on the location Nakkholmen 2. 21.06.2016.



Individuals: ca. 320

Area: whole area ca. 80 x 100 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: *Dracocephalum* plants are small and sparsely blooming, about 60%. It was the end of blooming period. I did not found small concentrations in distant SE part of location.

Care: Light clearing of bushes and mowing open areas once for 2-3 years is recommended.

<u>Dragehodegruppa</u> takes care of *Dracocephalum* on Nakkholmen.

GPS-coordinates: 59°53'19.20"N 10°41'28.40"E Dracocephalum-Nakkholmen3

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

Date of watch: 21.06.2016.

Owner:

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



Photo 1. Southern part of the location Nakkholmen 3. 21.06.2016.



Photo 2. Plants are very small and sparsely blooming. 21.06.2016.



Individuals: ca. 90 (80 + 10)

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: *Dracocephalum* were found in both places – on the main site located close to fence of a house no.168 and lilac bushes and another small one about 10 m to the North-East also along edge of lilac bushes.

Dracocephalum plants were in quite good condition comparing with other locations at Nakkholmen and 70% were blooming.

Care: <u>Dragehodegruppa</u> takes care of *Dracocephalum* on Nakkholmen.

GPS-koordinates: 59°53'15.47"N 10°41'46.87"E Dracocephalum-Nakkholmen4

Date of watch: 21.06,2016.

Owner:

Photos: R. Gramsz



Photo 1. Main area of location Nakkhomen 4. 21.06.2016.

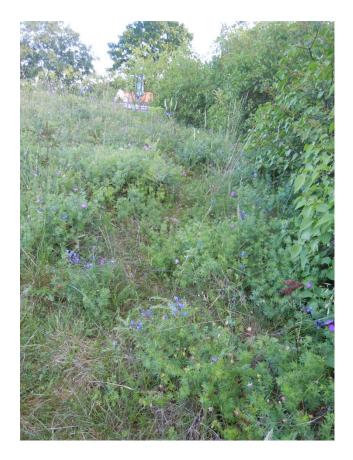


Photo 2. *Dracocephalum* on smaller site of location Nakkholmen 4. 21.06.2016.



Individuals: ca. 90

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: Plants were smaller than usually but there were some big tufts 30 - 40cm high. It was the end of blooming period, ca. 50% of plants were blooming. There are many concentrations spread in the ridge.

Care: Seams that this location is main place of interest of <u>Dragehodegruppa</u>. Most of *Dracocephalum* concentrations are fence with rope and/or mark with sticks. Dragehodegrupa also do all bushes catting.

GPS-coordinates: 59°53'28.93"N 10°41'42.38"E <u>Dracocephalum-Nakkholmen5</u>

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

Date of watch: 21.06.2016.

Owner:

Photos: R. Gramsz



Photo 1. The main site of location Nakkholmen 5. View toward NE. 21.06.2016.



Photo 2. Site on SW part of location. 21.06.2016.



Individuals: 25

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: *Dracocephalum* plants are small and ca. 50% of them were sparsely blooming. It was end of blooming period. Small and not blooming plants were difficult to notice.

Care: Dragehodegruppa takes care of *Dracocephalum* on Nakkholmen.

GPS-coordinates: 59°53'13.8"N 10°41'44.7"E <u>Dracocephalum-Nakkholmen6</u>

Date of watch: 21.06. 2016.

Owner:

Photos: R. Gramsz



Photo 1. Area of the location Nakkholmen 6. 21.06.2016.



Photo 2. Plants were small and sparsely blooming. 21.06.2016.



Individuals: 3

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

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

Condition: Small, but all in flower.

Care: Dragehodegruppa takes care of *Dracocephalum* on Nakkholmen.

GPS-coordinates: 59°53'19.9"N 10°41'49.3"E Dracocephalum-Nakkholmen7

Date of watch: 21.06.2016

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



Photo 1. Dracocephalum plants (middle of photo) on location 7. 21.06.2016.



Individuals: 3

Area: 2 x 4 m, 0.002 ha

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

Condition: Old tufts, all in flower.

Care: <u>Dragehodegruppa</u> takes care of *Dracocephalum* on Nakkholmen.

Date of watch: 19.06. 2015

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



Photo 1. Dracocephalum plants on location 8. 21.06.2016.



Individuals: 20

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 small, not higher than 20 cm, ca. 50% were blooming.

Care: <u>Dragehodegruppa</u> takes care of *Dracocephalum* on Nakkholmen.

Date of watch: 21.06.2016.

Owner:

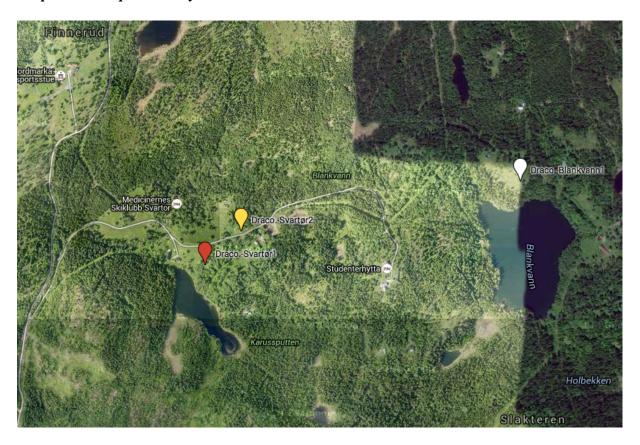
Photos: R. Gramsz



Photo 1. Site with *Dracocephalum* plants on Location 9. 21.06.2016.

NORDMARKA – 2015

Map. . Dracocephalum ruyschiana – Nordmarka.



< 10 specimens (white)

11 – 100 specimens (yellow)

101 – 300 specimens (red)

> 300 specimens (violet)

Location: Svartor 1



Individuals: ca. 105 (95 + 10)

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: *Dracocephalum* are in full, but very pure blooming at a time of observation. About 50% were blooming. Average high of vegetative plants was about 10 cm and blooming sprouts maximum to 20 -25 cm. On the neighboring meadow 9 blooming and 1 vegetative individuals were found but as usually it was very difficult to notice them in high, dense meadow vegetation.

Care: Dracocephalum location was fence against grazing animals in this year.

GPS-coordinates: 60° 1'31.32"N 10°38'51.99"E Dracocephalum-Svartor1

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

Date of watch: 2.07.2016.

Owner:

Photos: R. Gramsz



Photo 1. Top of rocky hill - main area on location Svartør 1. 2.07.2016.



Photo 2. Area with *Dracocephalum* on the neighboring meadow fence against grazing animals in this year. 2.07.2016.

Location: Svartør 2



Individuals: ca. 25

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*

Condition: Ca. 70% of plants were blooming. *Dracocephalum* covered the same area as last years. Average height was about 15 cm. There is no horse grazing on this location.

Care:

GPS-coordinates: 60° 1'34.85"N 10°38'59.56"E Dracocephalum-Svartor2

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

Date of watch: 2.07.2016.

Owner:

Photos:

NORDMARKA, Blankvann - 2016

Location: Blankvann 1



Individuals: 1

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: Only one vegetative individual has been found.

Care:

GPS-coordinates: 60° 1'40.10"N 10°39'58.30"E Dracocephalum-Blankvann1

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

Date of watch: 21.06.2016.

Owner:

Photos: Observer: R. Gramsz