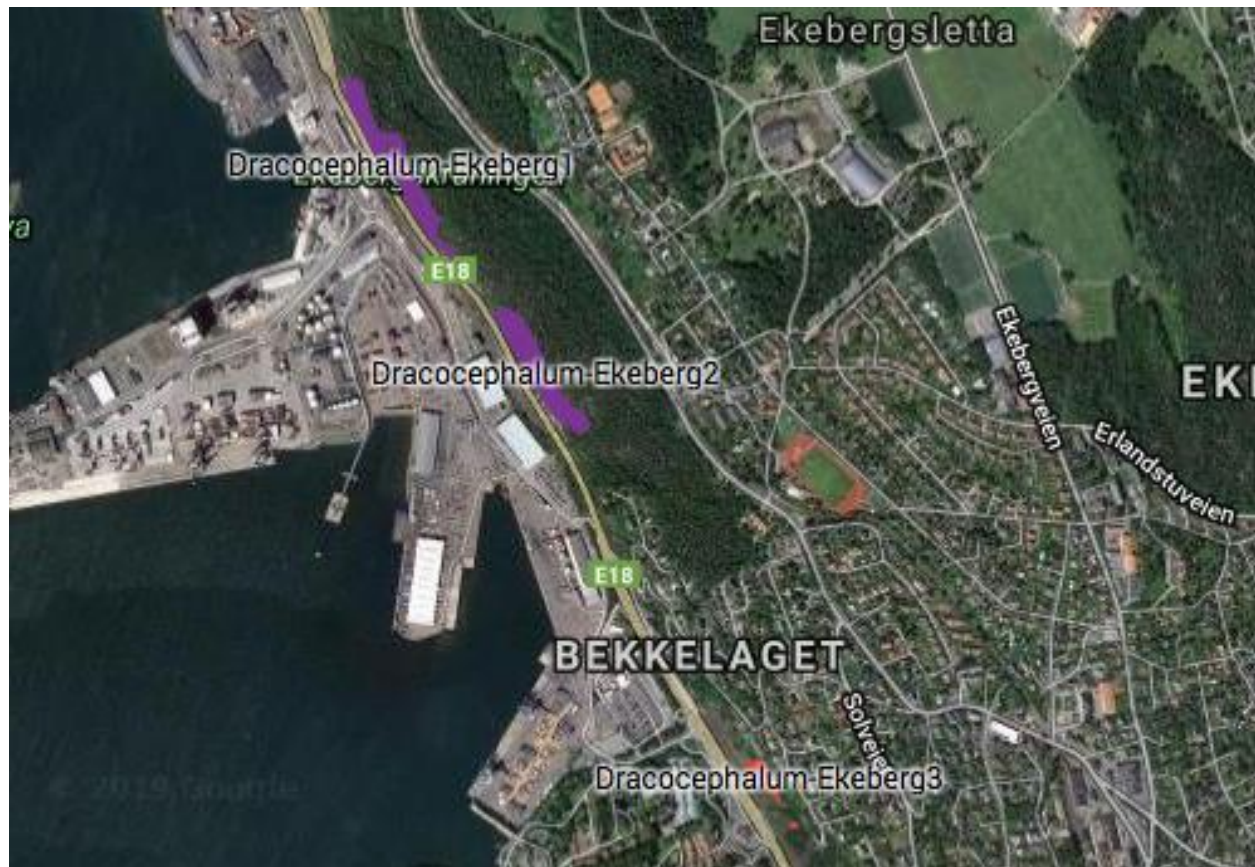


## EKEBERG – 2018

### Map. Dracocephalum – Ekeberg 2018



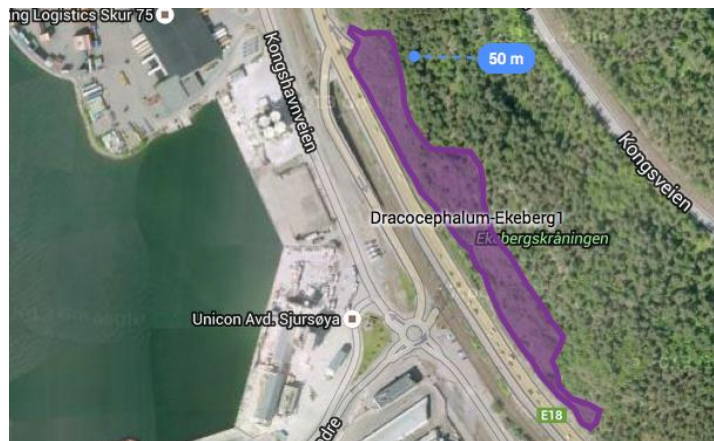
< 10 specimens (white)

11 – 100 specimens (yellow)

101 – 300 specimens (red)

> 300 specimens (violet)

**Location: Ekeberg 1 (A)**



**Individuals:** ca. 600

**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:** This location is very dry this year. Only about half of this site population start to grow and now plants are small, wilted and in many places completely dry. Some plants have scarcely bloomed but now the flowers are dried up.

**Care:** There is still some garbage left on this location.

**GPS-coordinates:**

Central part of location 59°53'30.50"N 10°45'41.40"E [Dracocephalum-Ekeberg1](#)

North edge of location 59°53'35.20"N 10°45'35.50"E [Dracocephalum-Ekeberg1\(N\)](#)

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

**Date of watch:** 11.06.2018.

**Owner:**

**Photos:** R. Gramsz

**Observer:** R. Gramsz





Photo 1. Location Ekeberg 1 – very dry this year. 11.06.2018.



Photo 2. Some of *Dracoccephalum* tufts were completely dry out. 11.06.2018.

**Location: Ekeberg 2 (B) Jomfrubråten**



**Individuals:** ca. 500

**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 uva-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: *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:** This location is very dry this year. Only about half of this site population start to grow and now plants are small, wilted and in many places completely dry. Some plants have scarcely bloomed but now the flowers are dried up.

**Care:** Some small trees (*Pinus sylvestris*) and bushes overgrowing this location were cut.

**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\(N\)](#)

South edge of location 59°53'14.60"N 10°45'01.40"E [Dracocephalum-Ekeberg2\(S\)](#)



**Date of watch:** 11.06.2018

**Photos:** R. Gramsz

**Observer:** R. Gramsz

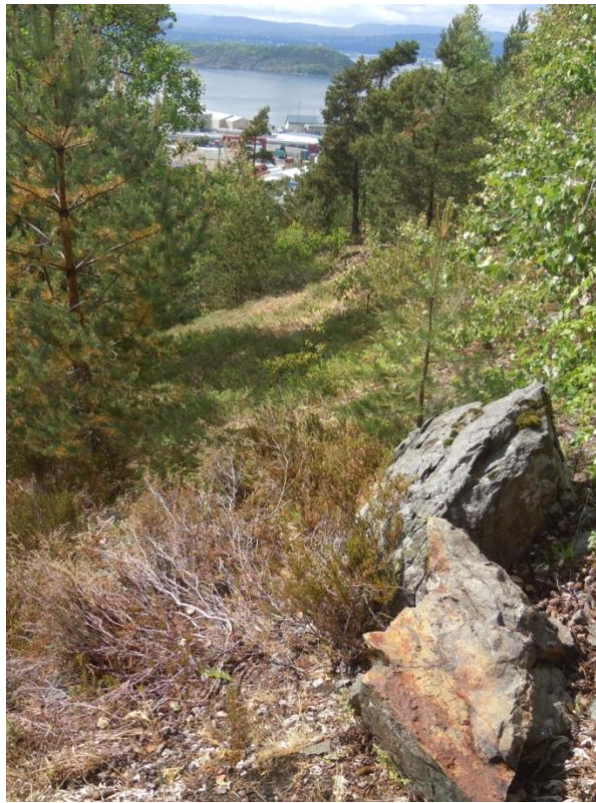


Photo 1. The largest patch with *Dracocephalum* in location Ekeberg 2 – very dry. 11.06.2018.



Photo 2. *Dracocephalum* plants are small, wilted and flowers dried out. 11.06.2018.

**Location:** Ekeberg 3 (C) Bekkelaget



**Individuals:** ca. 200

**Area:** 150 x 50 m (0.221 ha) + 10 x 10 m (0.012 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:** Most of plants are small and wilted and in many places completely dry. Only plants growing under bushes or trees or in some concavities are in better condition.

**Care:**

**GPS-coordinates:**

Central part of location 59°52'51.96"N 10°46'26.78"E [Dracocephalum-Ekeberg3](#)

North edge of location 59°52'53.59"N 10°46'24.15"E [Dracocephalum-Ekeberg3\(N\)](#)

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

**Date of watch:** 21.06.2018.

**Owner:**

**Photos:** R. Gramsz

**Observer:** R. Gramsz



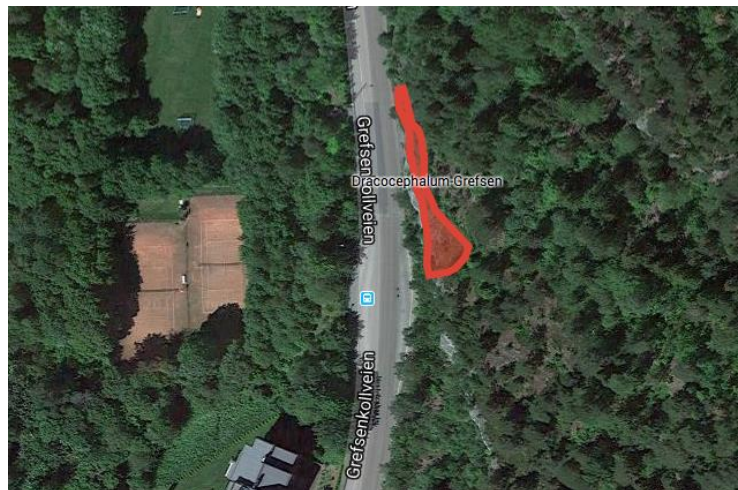


Photo 1. Southernmost site on the location Ekeberg 3. 21.06.2018.



Photo 2. The main part of location, view to the South. 21.06.2018.

## GREFSEN – 2018



**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 seems that it not disturbs growth of *Dracocephalum* tufts. Location is surrounded by pine forest with dominating in undergrowth *Calluna vulgaris* and *Vaccinium myrtillus*. On the location grows only small trees and bushes covering ca. 30%. Trees and bushes layer: *Berberis vulgaris*, *Corylus avellana*, *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. silvaticum*, *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 as for drought and about 50% were bloomed. Tufts were 15 -25 cm high.

**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:** 23.06.2018.

**Owner:**

**Photos:** R. Gramsz

**Observer:** R. Gramsz





Photo 1. Location Grefsen 1, View towards South. 23.06.2018.



Photo 2. *Dracocephalum* on location Grefsen 1, plants were in good condition as for drought but the flowers were already overblown and dried. 23.06.2018.

## HEGGHOLMEN – 2018



**Location:** Heggholmen 1

**Individuals:** ca. 215

**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 last year) *Rosa* sp., *Berberis vulgaris* and *Allium vineale*, *Cotoneaster* sp., *Filipendula vulgaris*, *Fragaria vesca*, *Geranium sanguineum*, *Hylotelephium telephium* ssp. *maximum* (*Sedum telephium* = *Sedum maximum*) *Polygonatum odoratum*, *Sedum album*, , *Thymus pulegioides*, *Vincetoxicum rossicum*.

**Condition:** *Dracocephalum* plants were in good condition as for drought and were already overblown. There were 50 tufts on western side of footpath (15 – 25 cm high) and 165 counted on eastern side (15 -25(50) cm). I estimate 50% plants were blooming. This location of *Dracocephalum* seems to be stable but plants grow still on the same area (without expanding).

**Care:** This area should be mowed by motor scythe once every 2 - 3 years after *Dracocephalum* seeds are ripen. The area was last mowed in August 2014.

**GPS-coordinates:** 59°52'55.90"N 10°42'42.10"E [Dracocephalum-Heggholmen1](#)

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

**Date of watch:** 25.06.2018.

**Owner:**

**Photos:** R. Gramsz

**Observer:** R.Gramsz





Photo1. General view of location on Heggholmen. 25.06.2018.



Photo 2. Some of *Dracocephalum* plants growing in the shadow reach 50 cm. 25.06.2018.

## **KILLINGEN** – 2018

### Map. Dracocephalum-Killingen



< 10 specimens (white)

**11 – 100 specimens** (yellow)

**101 – 300 specimens** (red)

**> 300 specimens** (violet)



**Location: Killingen**



**Individuals:** ca. 155

**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 vulneraria*, *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. Average height of tufts was 5 – 15(20) cm and some plants were completely dried. Only about 10% tufts were blooming. There were few very small alive plants on very dry lawn.

**Care:** Owner of this area was not watering his lawn and *Dracocephalum* location in this year.

**GPS-coordinates:** 59°54'29.80"N 10°39'26.50"E [Dracocephalum-Killingen](#)

**Date of watch:** 23.06.2018.

**Owner:**

**Photos:** R. Gramsz

**Observer:** R. Gramsz



Photo 1. Killingen, location was very dry this year. 23.06.2018.



Photo 2. Few very small, alive *Dracocephalum* twigs existed on dry lawn. 23.06.2018.



## MALMØYA – 2018



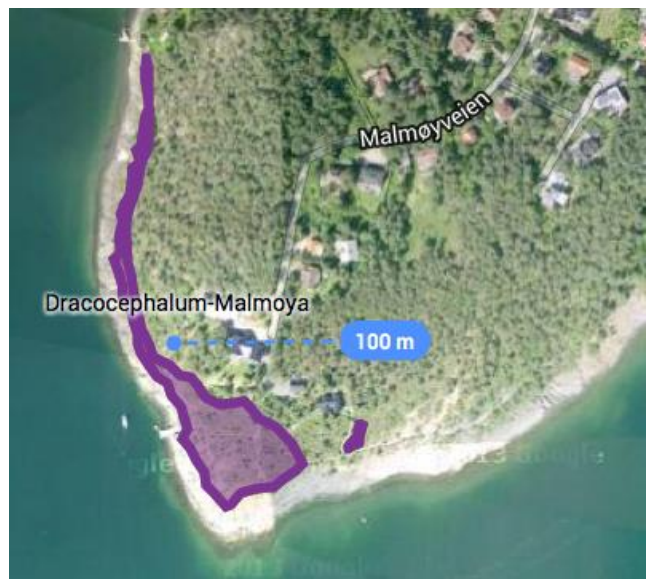
< 10 specimens (white)

11 – 100 specimens (yellow)

101 – 300 specimens (red)

> 300 specimens (violet)

**Location: Malmøya**



**Individuals:** ca. 635

**Area:** 400 x 80 - 20m (0.655 ha + 0.019 ha)

Potential habitat: 600 x 100 m (...but there was no *Dracocephalum* on SE coast 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 vulneraria*, *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 *Dracocephalum* could be found on 3 concentrations on steep western slope, one big concentration in SW part of location and 1 in Eastern part. Due to hot and dry weather *Dracocephalum* tufts were small and quite often grows only as a single twigs. It was end of very sparse blooming. Anyway *Dracocephalum* survive hit and drought quit well comparing with other plants.

**Care:**

**GPS-coordinates:**

Central part of location 59°51'42.10"N 10°45'04.20"E [Dracocephalum-Malmøya](#)



East edge of location 59°51'42.40"N 10°45'10.10"E [Dracocephalum-Malmoya\(E\)](#)

North edge of location 59°51'49.70"N 10°45'01.00"E [Dracocephalum-Malmoya\(NW\)](#)

**Date of watch:** 21.06.2018.

**Owner:**

**Photos:** R. Gramsz

**Observer:** R. Gramsz



Photo 1. The most NW part of *Dracocephalum* location. 21.06.2018.





Photo 2. Central part of Malmøya location. 21.06.2018.



Photo 3. *Dracocephalum* survive hit and drought quit well comparing with other plants. 21.06.2018.