

# Can the wild blueberry (*Vaccinium myrtillus* L.) be tamed?

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## A new project

In a four year project (2008-2011) the potential will be examined for commercial production of the European blueberry (*V. myrtillus*) in Norway, with most effort investigating semi-cultivation practices on forestland. However, adaption to growth on agricultural land will also be in focus as well as selecting superior clones adapted to Norwegian regions, and development of effective propagation methods. Also, it is given priority to find how the European blueberry (EB) react to climatic parameters, which will be examined under controlled experiments and paralleled by meteorological data from forest fields.

## Experiences and results in the first project year

Fruit yield at two locations in Mid-Norway varied between plots from 0 kg ha<sup>-1</sup> at both sites to 550 and 78 kg ha<sup>-1</sup> in respectively Snåsa (Figure 1) and Lierne. The reason of this variation at Snåsa was probably soil unevenly exposed to drought, which was demonstrated by a reduced cover percentage of EB at some plots. This combined with relatively high temperature and low rainfall in mid-summer may have caused fruits not to develop. At Lierne the reason was different and caused by destruction of the understorey by heavy machines during forest cutting in 2006. The difference between the two locations is clearly illustrated in Fig. 2. In Sweden areas with high N-deposition EB was less frequent, less abundant and more susceptible to the leaf pathogen *Valdensia heterodoxa* than in areas with lower levels of N-deposition (Strengbom et al., 2003). Here, fertilization was undertaken once in mid July, and at Snåsa there was a tendency to increased yield when NP fertilization increased, while there was no effect of fertilization at Lierne (Table 1).

## Conclusion

The average yield at the Snåsa location was similar to a level reported earlier (Puchnina 1996). However, the maximum yield found here show that there is a potential to raise the yield substantially. We expect that the management practices we will introduce in the fields as well as introduction of experimental tasks, will help us to take out some of this potential.



Figure 1. European blueberry at the Snåsa location in August 2008. Foto: R. Nestby



Figure 2. European blueberry, Left: Snåsa Norway in 2008 15 years after clear cutting. Right: Lierne Norway in 2008 two years after clear cutting. Foto S. Grenne

Table 1. Fruit yield of European blueberry (*V. myrtillus*) after fertilization in mid July 2008 at two forest fields in Mid-Norway, clear cut respectively in 1993 and in 2006.

Fertilizer N-P kg ha <sup>-1</sup>	Fruit yield kg ha <sup>-1</sup>	
	Snåsa 300 m a.s.l.	Lierne 400 m a.s.l.
0 -0	134.6	29.4
15-10	118.5	53.6
15-20	150.5	38.0
30-20	175.5	37.7
Mean	144.8	39.7

## Litterature

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Puchnina, L.V., 1996. Crop yield of fruits of *Vaccinium myrtillus* L. in the Pinega national forest. *Rastitel nye Resursy* 32: 29-32.

Strengbom, J.; M. Walheim; T. Nasholm and L. Ericson, 2003. Regional differences in the occurrence of understorey species reflect nitrogen deposition in Swedish forests. *Ambio* 32: 91-97.