



Climafruit - the North Sea Collaborative Approach to Climate Change

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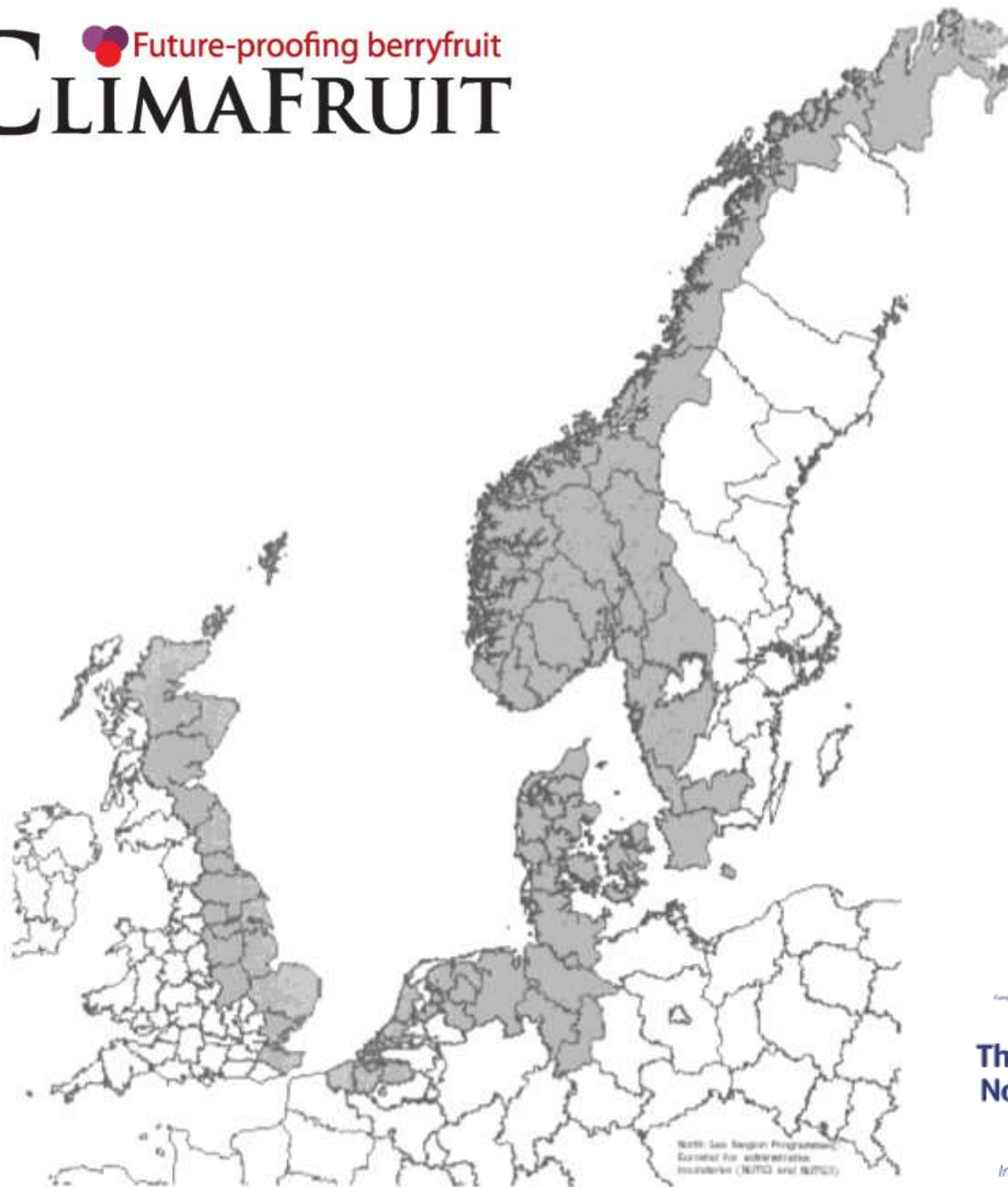
European Union  The European Regional Development Fund

**The Interreg IVB
North Sea Region
Programme**

*Investing in the future by working together
for a sustainable and competitive region*



Future-proofing berryfruit CLIMAFRUIT



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Climate Challenges

1. **Problems with lack of chilling in some black currant cultivars, especially in southern Great Britain.**

In Denmark we observe a lack of chilling as a longer and more uneven flowering in some years

At the same time less frost hardiness in some cultivars

2. **Experiencing more extremes and local climate events and more uneven distributions of water**
3. **Important to find new cultivars suited for changing climate**



Climate Challenges

- 4. Important to evaluate cultivar performance at different locations in the North Sea Region. What can we expect in the coming years, what can we learn from each other, how can we become more prepared for climatic change.**
- 5. Focus on finding dormancy genes in black currant to be able to make targeted and successful breeding.**
- 6. Sustainability important in terms of pesticides and water for irrigation**



**Project that is focused on blackcurrants,
raspberries & blackberries**

**run from 1 October 2009 to
30 September 2013**

has activities in 5 countries

**includes activities equivalent to €6
million (50 % funding from EU Interreg
IVB North Sea region Programme)**



What is the Interreg IVB North Sea Programme

The aim of the **NSR** Programme is to make the **North Sea Region** a better place to live work & invest in.

- By enhancing the overall quality of life for residents of the NSR
- By ensuring that there is access to more & better jobs
- By sustaining & enhancing the acknowledged environmental qualities of the region
- By improving accessibility to places & ensuring that our communities are viable, vibrant & attractive places to live & work.



Need to work in a transnational way

- **Develop a common set of tools & databases**
- **Exchange plant material**
- **Carry out trials across different climates**
- **Evaluate performance**
- **Exchange fruit samples for analysis**
- **Exchange data and knowledge**
- **Develop capability via shared PhD students**

Three workpackages:

Sustainable practices

- **Transnational cultivar trials sending fruit samples to JHI for analysis, climatic data etc (organic, conventional, protected cul)**

Health and wellbeing

- **Chemical analysis of health compounds (polyphenols) and testing some of them in tissue culture (breeding purposes)**

Adaptation strategies to temperature and water

- **Trials to evaluate adaptation to water access or low or high temperature**
- **Leaf samples to JHI for RNA, gene expression (breeding purposes)**



Outcomes:

‘Open houses’ to show and discuss the trials

Growers and advisors visits

Popular articles

Press releases

Web-site

<https://djfextranet.agrsci.dk/sites/climafruit/offentligt/Sider/PressReleases2012.aspx>

new PhD-students

new postdoc

Education of bachelors and masters

min 14 international articles &

min 8 international conference presentations



Overall Outcomes:

**Virtual Soft Fruit Climate
Change Environment Centre**

**Sustainable production solutions via optimal
use of water, nutrients & chemicals**

**Secure the production of locally grown fruit,
providing fresh healthy food products &
natural ingredients for foods with reduced
chemical residues**

**Reducing the carbon footprint of the berry fruit
industry**

Securing the berry industry in the region



More information on the website

<https://djfextranet.agrsci.dk/sites/climafruit/offentligt/Sider/front.aspx>

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