Berry Crop and Quality of Cultivars of Black Currant in Organic Growing

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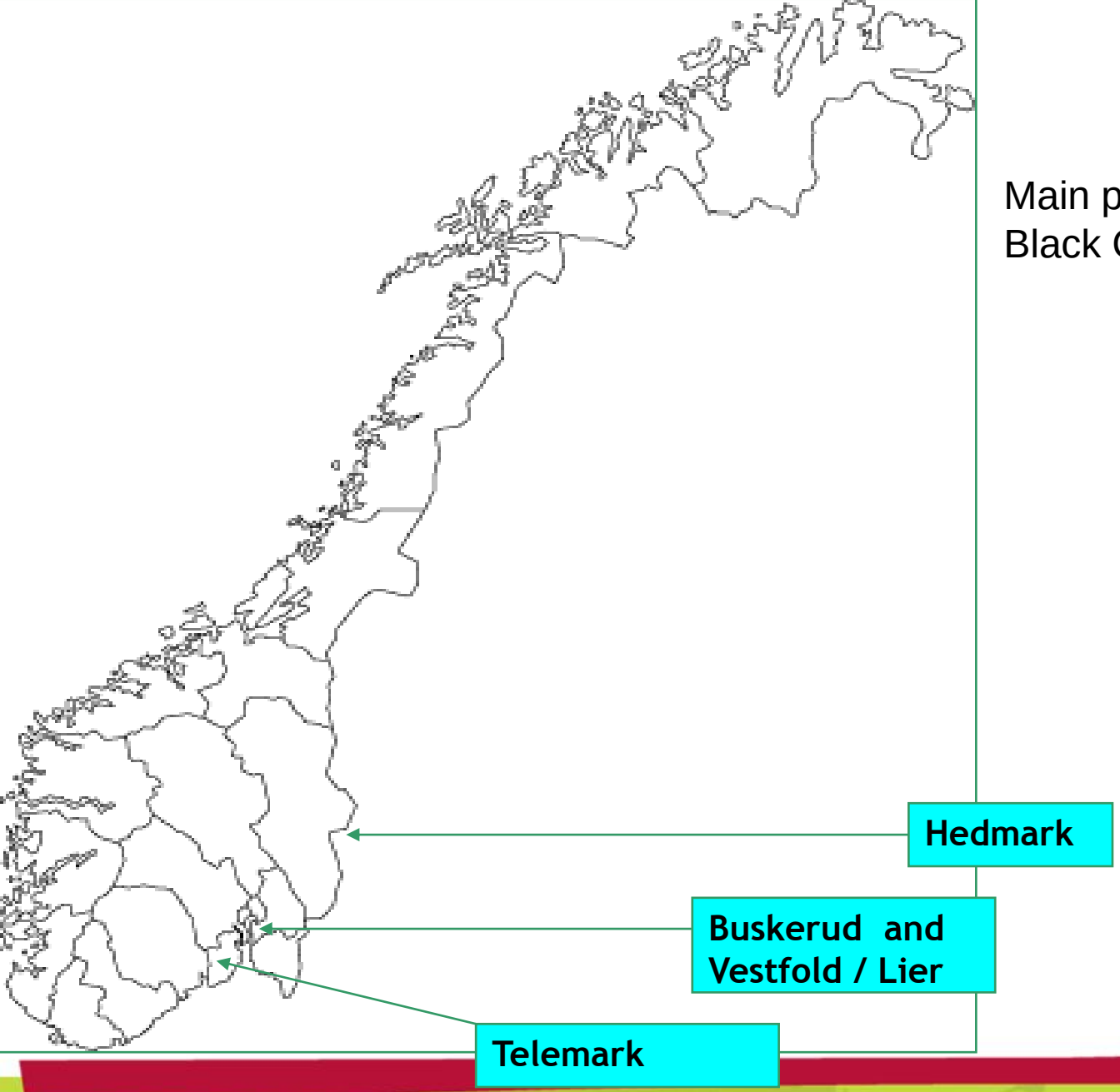
The Project:

Production and Marketing of Black and Red Currant and Gooseberry (Ribes)



Main production Regions of Black Currants in Norway



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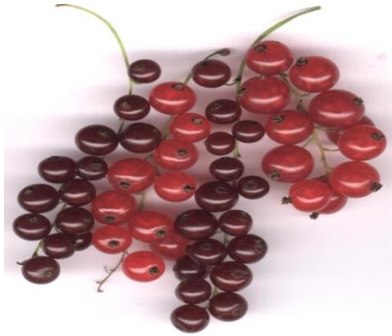
Challenges to look at:

1. Cultivars for different markets
2. Desease and pest resistance
3. Yield
4. Season
5. Quality – taste, chemical content
6. Production methods - pruning

Production and Cultivars

- Black currants



- Red currants

- Gooseberry

- Cultivar evaluation
  - Berry crop
  - Berry quality
  - Production methods
  - Pest resistance

Cultivars Evaluation in Black Currant

Main Cultivars:

1. Ben Alder
2. Ben Tron
3. Narve Viking
4. Ben Nare

Other Cultivars:

1. Kristin
2. Ben Hope
3. Varde Viking
4. Ben Gairn
5. Ben Dorain
6. Ben Avon
7. Ben Lair
8. Titania
9. Tiben
10. Tisel
11. 8844 - 4
12. 8844 - 13
13. Intercontonental
14. Polar

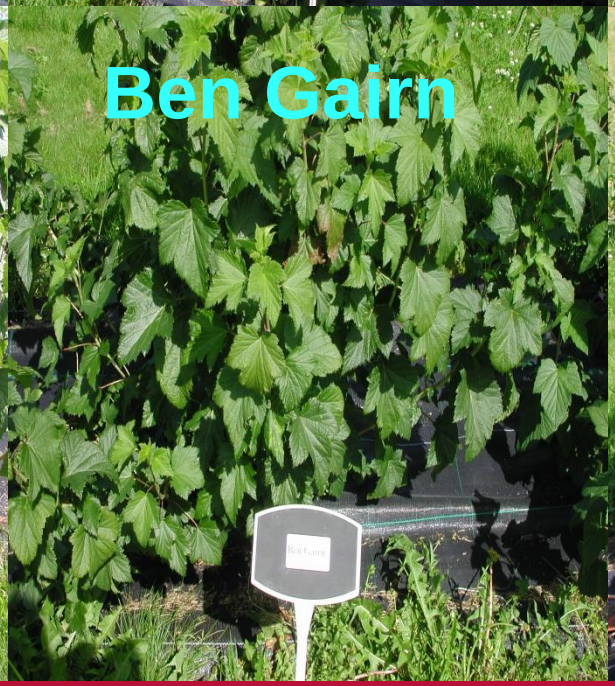
Cultivar Evaluation


Narve Viking

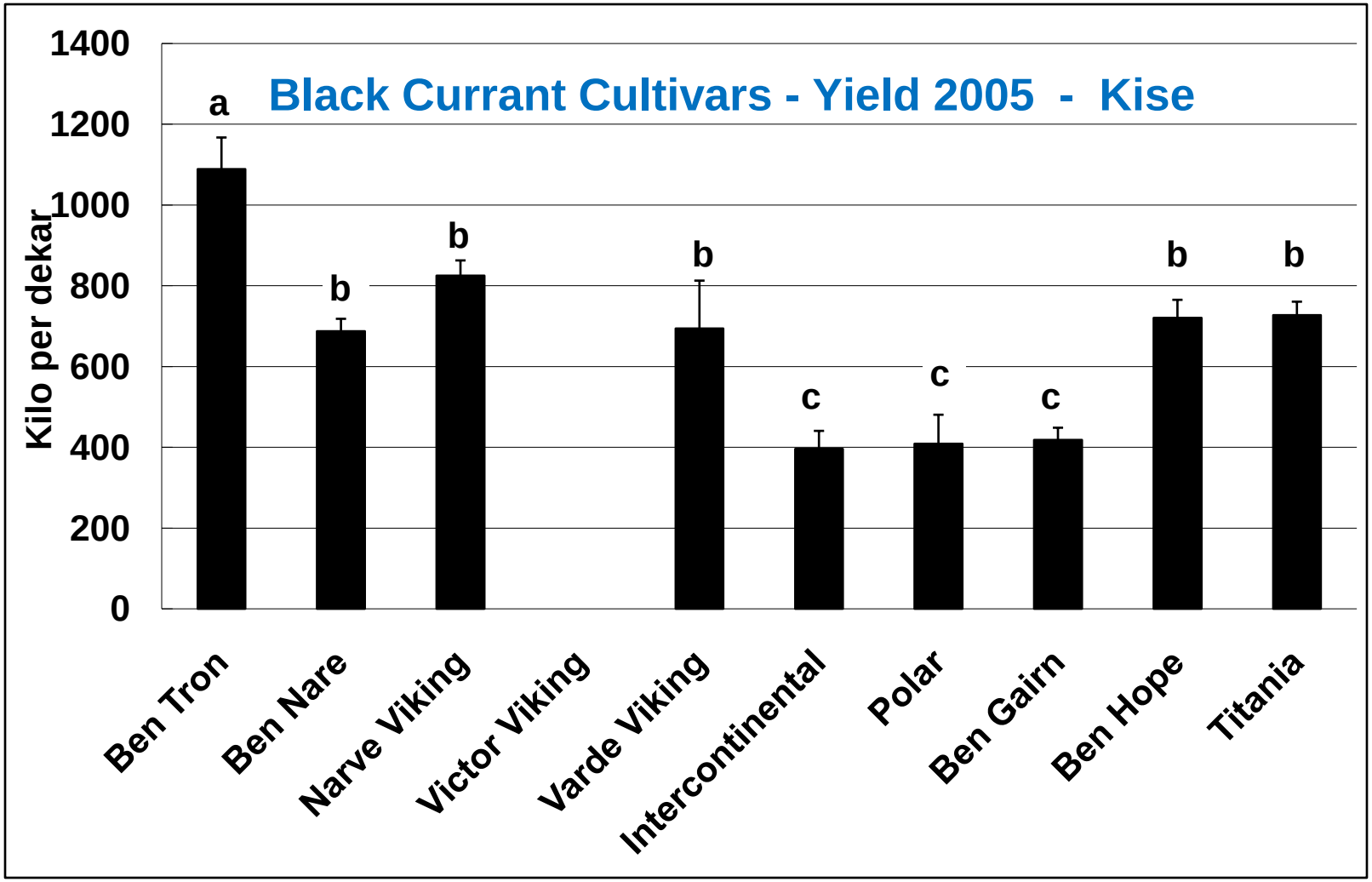

Ben Tron


Ben Nare


Titania


Ben Gairn


Ben Hope


Black Currant Cultivars - Yield 2005 - Kise
Kilo per dekar
1400
1200
1000
800
600
400
200
0
a
b
b
b
c
c
c
b
b
Ben Tron
Ben Nare
Narve Viking
Victor Viking
Varde Viking
Intercontinental
Polar
Ben Gairn
Ben Hope
Titania

Cultivar evaluation – Yield of Cultivars in five years at Kise Tons /ha.

Cultivar	2005	2006	2007	2008	2009	Mean
Ben Tron	10.89	6.24	12.81	3.25	6.53	**7.94**
Ben Nare	6.87	5.22	11.41	8.90	5.74	**7.63**
Narve Viking	8.25	4.63	12.21	9.11	8.50	**8.54**
Varde Viking	6.94	2.12	8.42	6.52	6.86	**6.17**
Intercontinental	3.96	2.76	7.53	3.30	3.24	**4.16**
Polar	4.09	1.46	3.62	4.46	4.20	**3.57**
Ben Gairn	4.18	1.05	6.45	3.88	2.53	**3.62**
Ben Hope	7.20	6.03	10.11	5.11	6.29	**9.95**
Titania	4.85	3.13	4.81	6.28	5.19	**4.85**
Mean	**6.36**	**3.63**	**8.60**	**5.65**	**5.45**	

Quality of Ribes for the fresh market

Taste:

1. Sugar-sweetness
2. Acids-acidity

Clusters:

1. Long
2. Little run-off
3. Even maturity

Berries

1. Big and even

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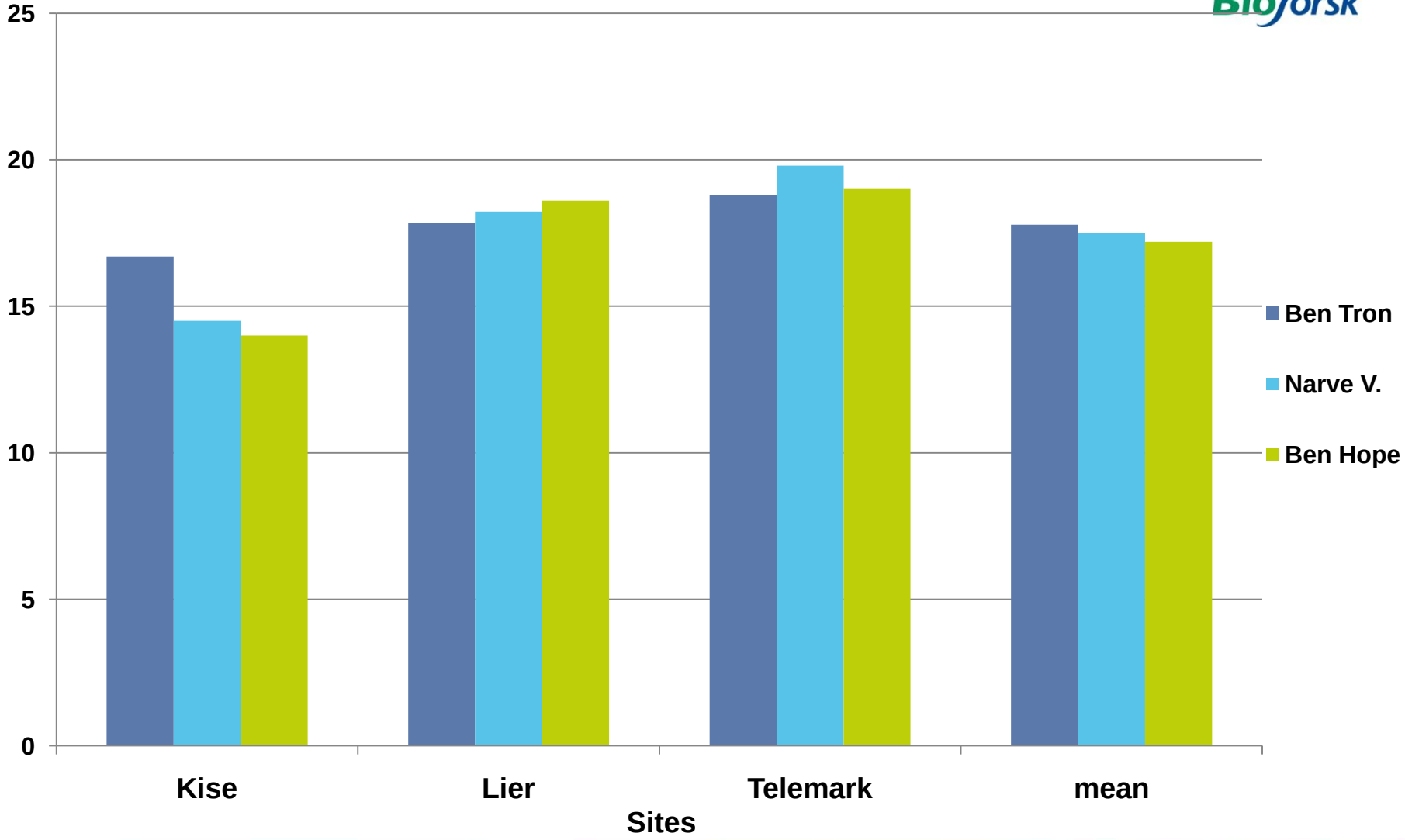
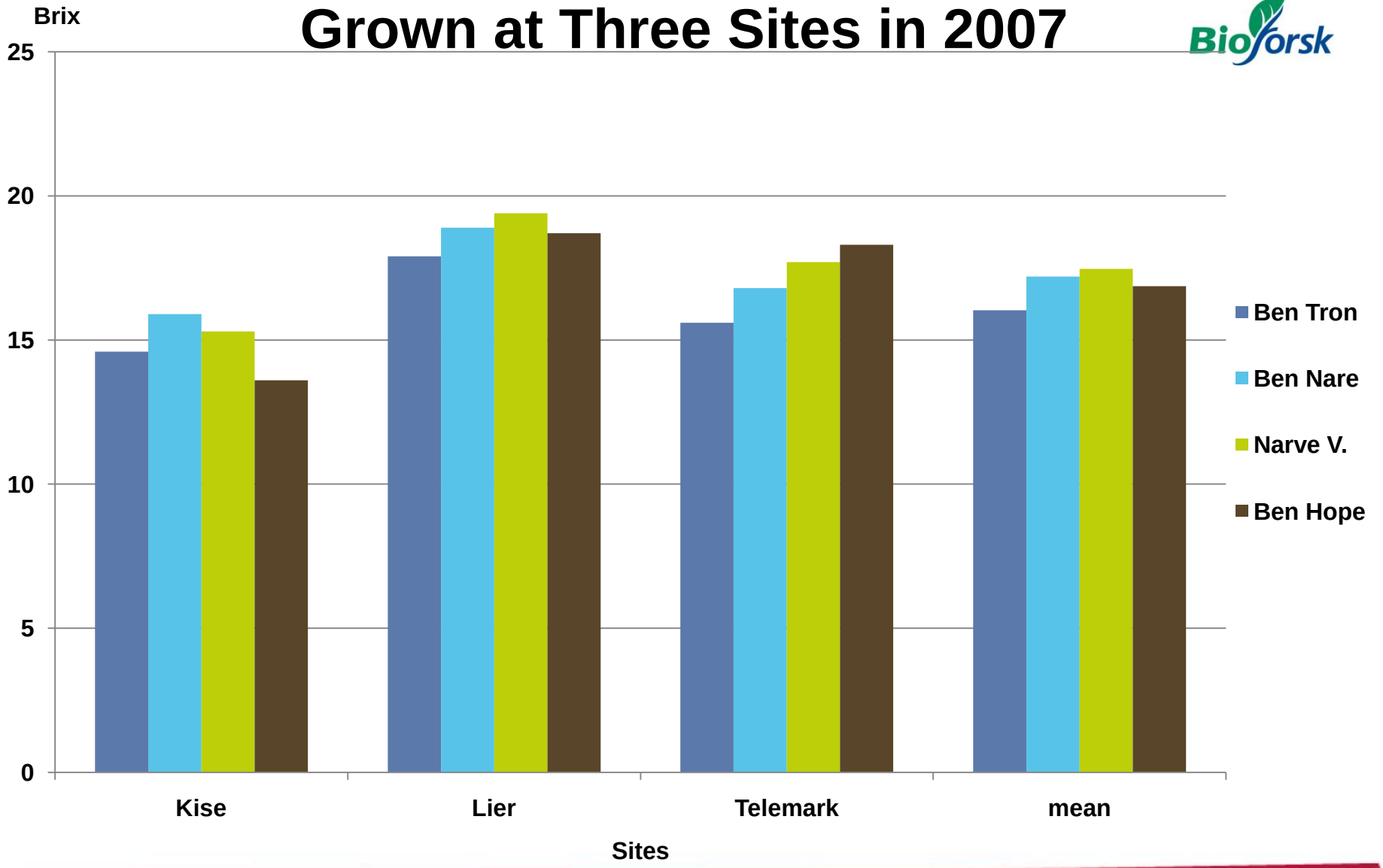
Ben Tron

Kristin

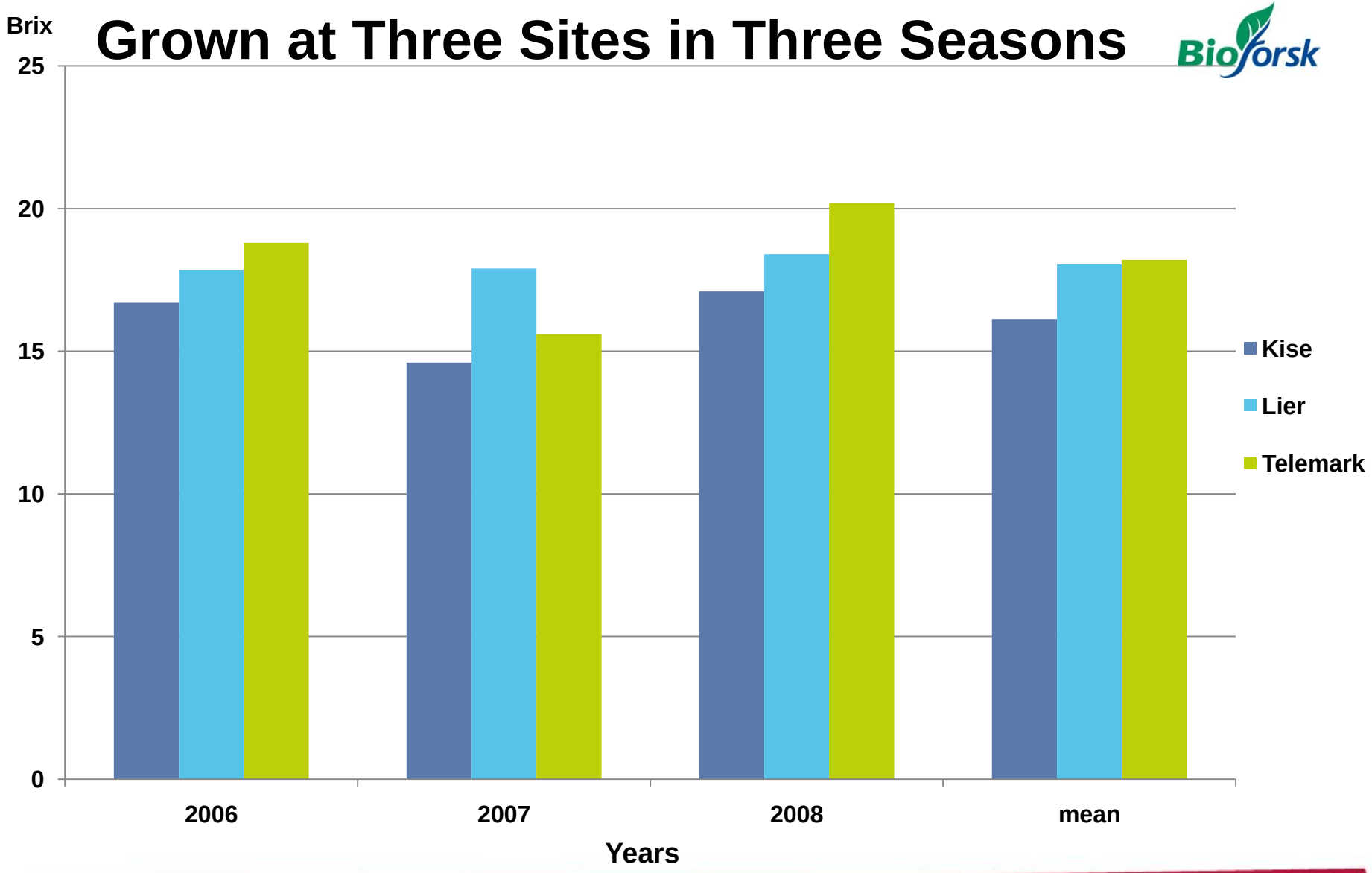
Soluble Solids in Berries of Three Cultivars Grown at Three Sites in 2006



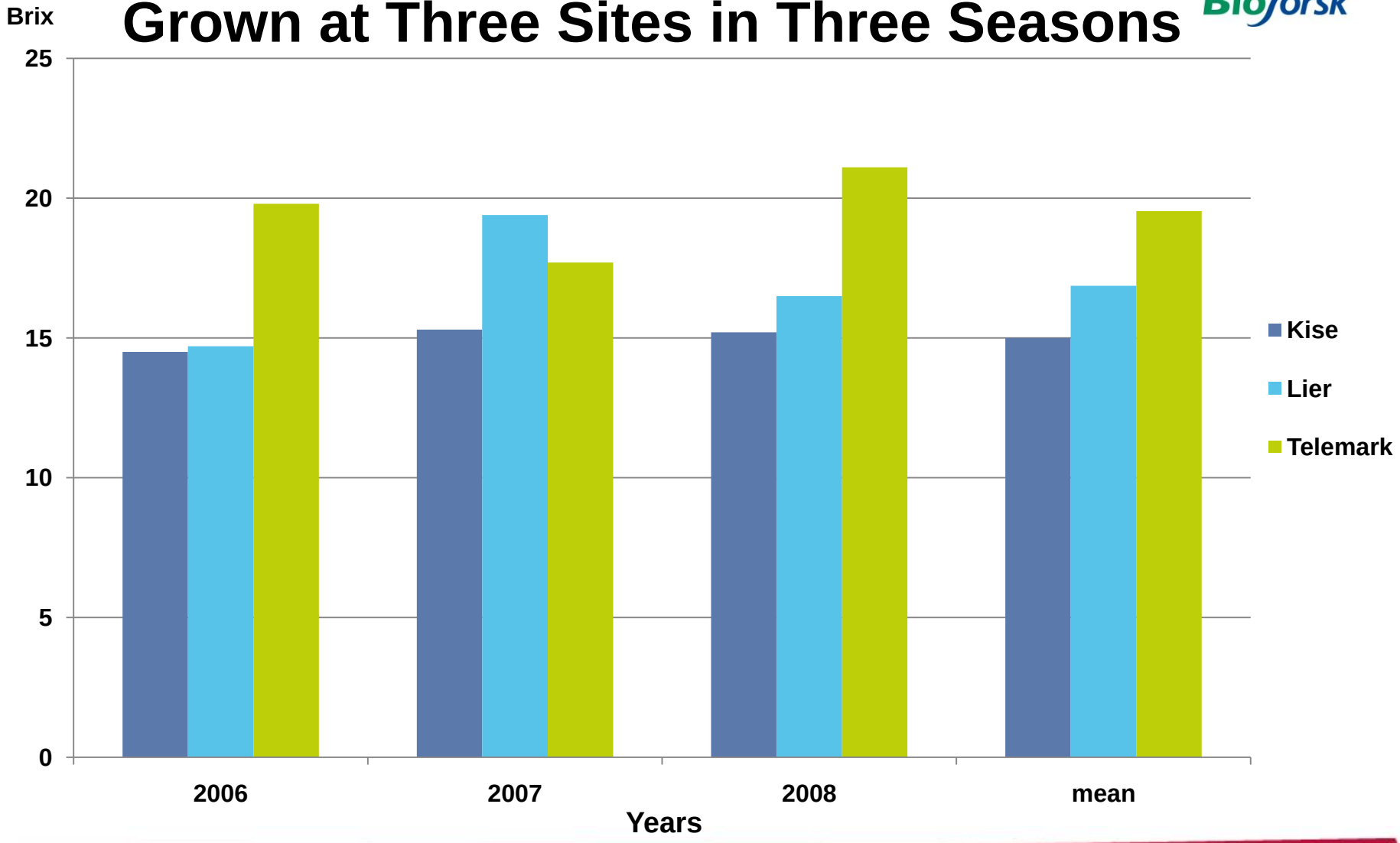
Soluble Solids in Berries of Four Cultivars Grown at Three Sites in 2007



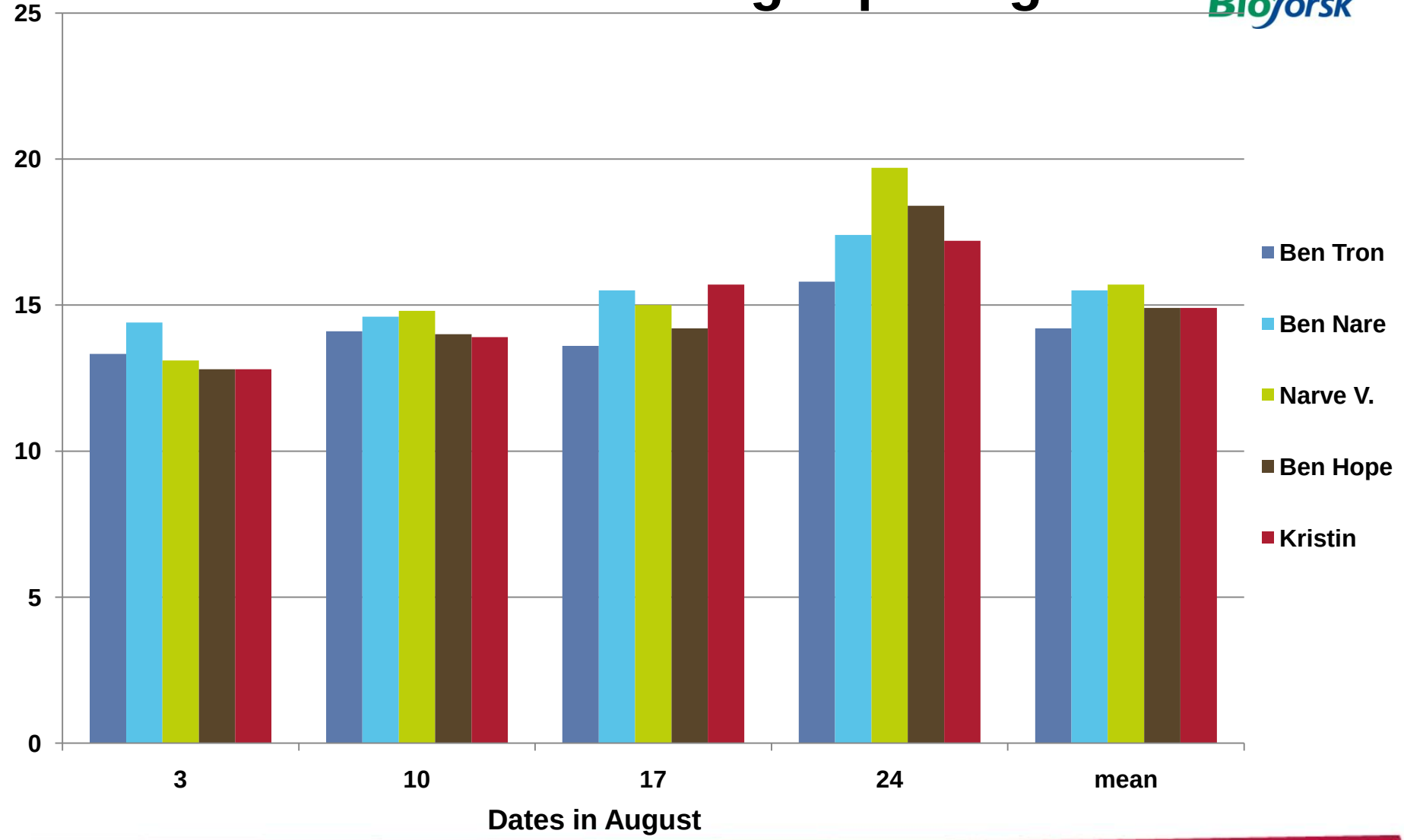
Soluble Solids in Berries of Ben Tron Grown at Three Sites in Three Seasons



Soluble Solids in Berries of Narve Viking Grown at Three Sites in Three Seasons



Soluble Solids in Berries of Five Black Currant Cultivars During Ripening in 2009



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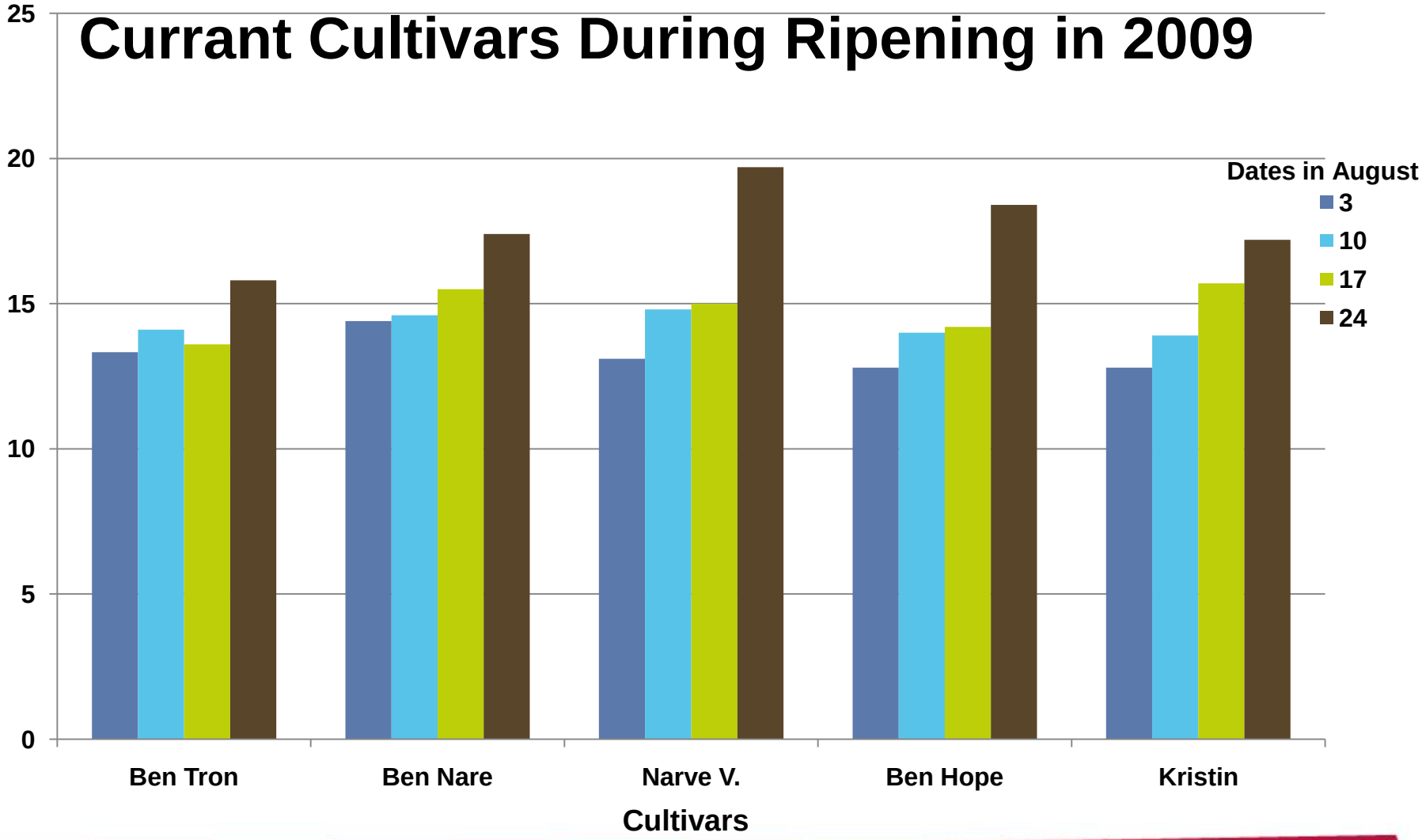
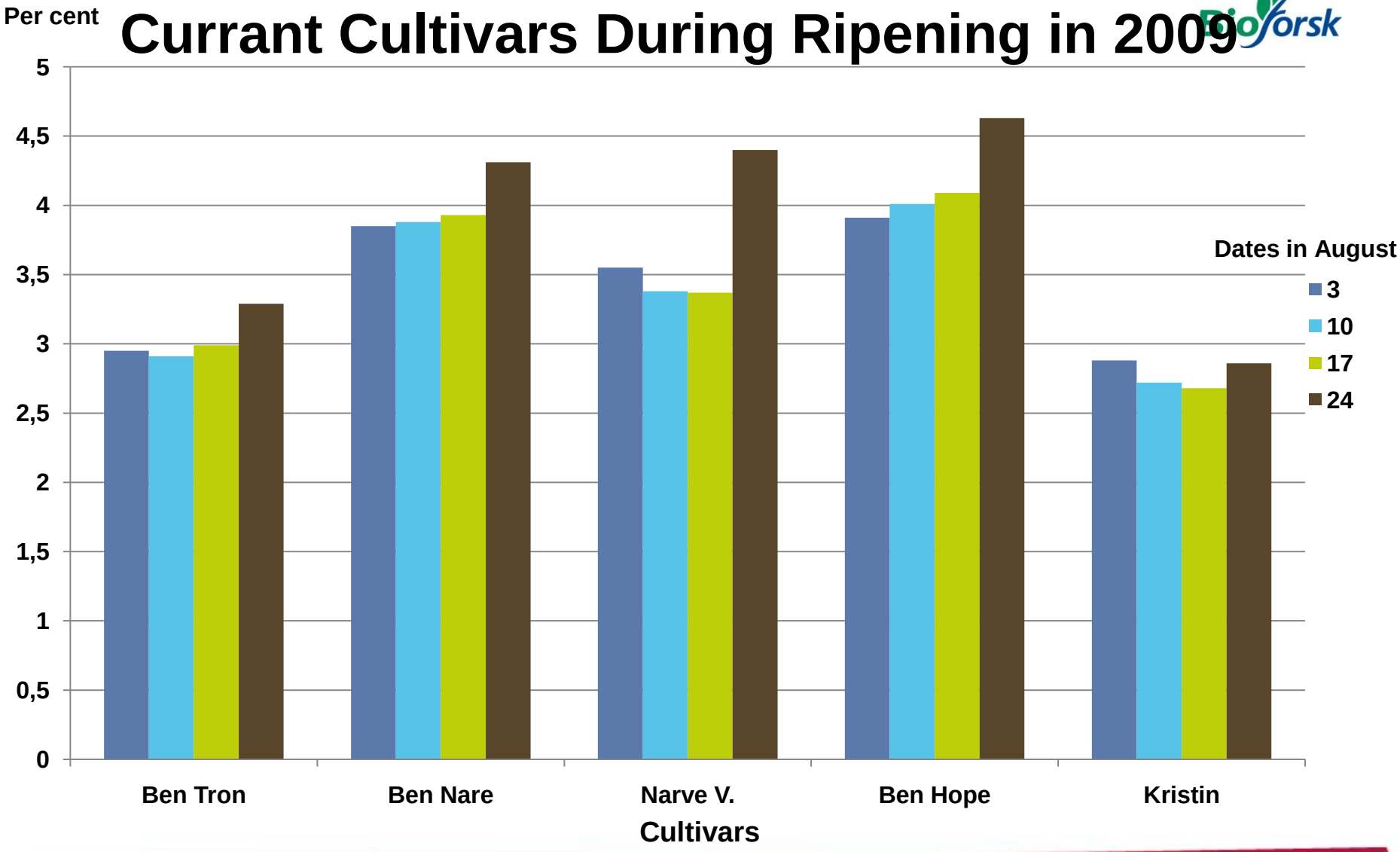
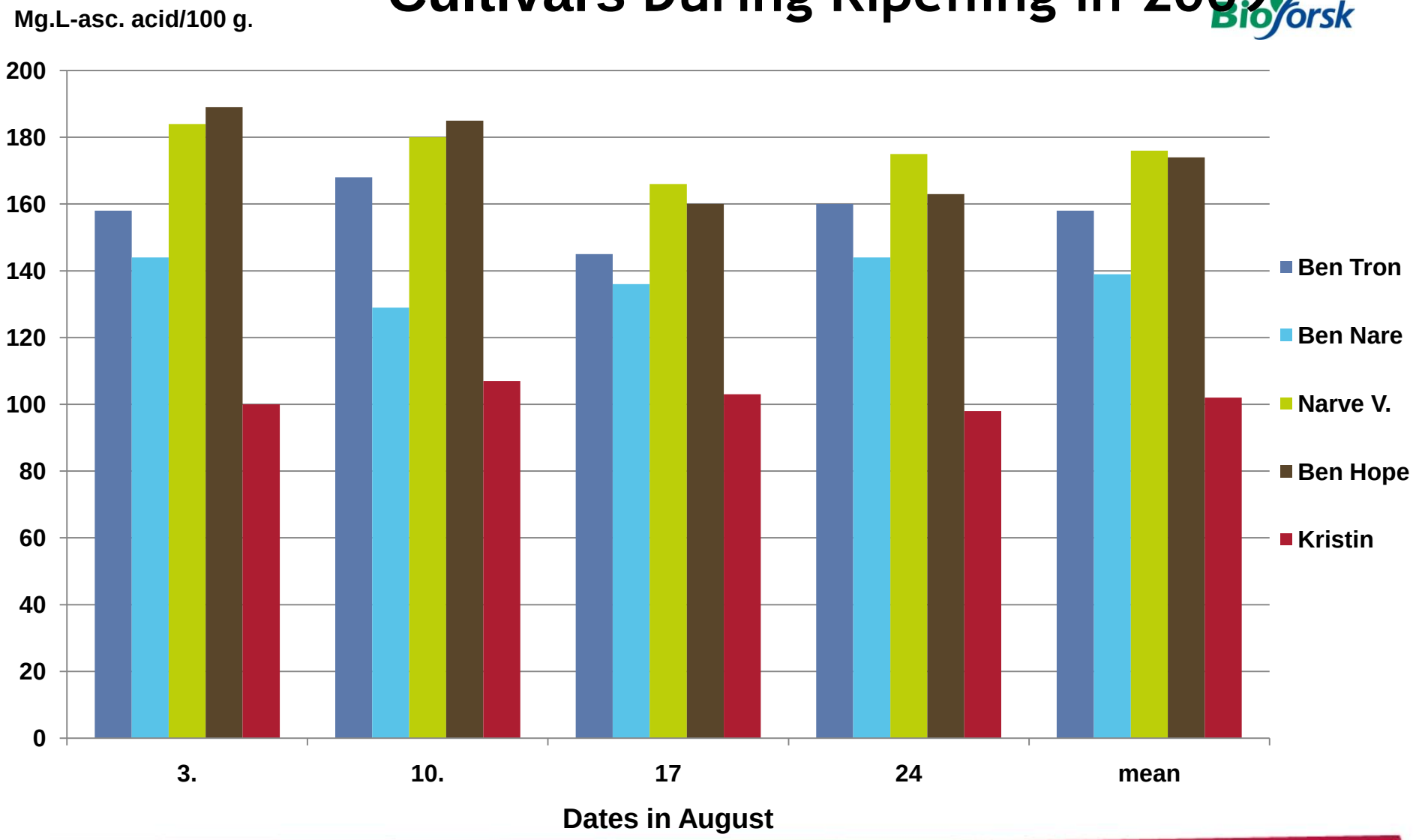


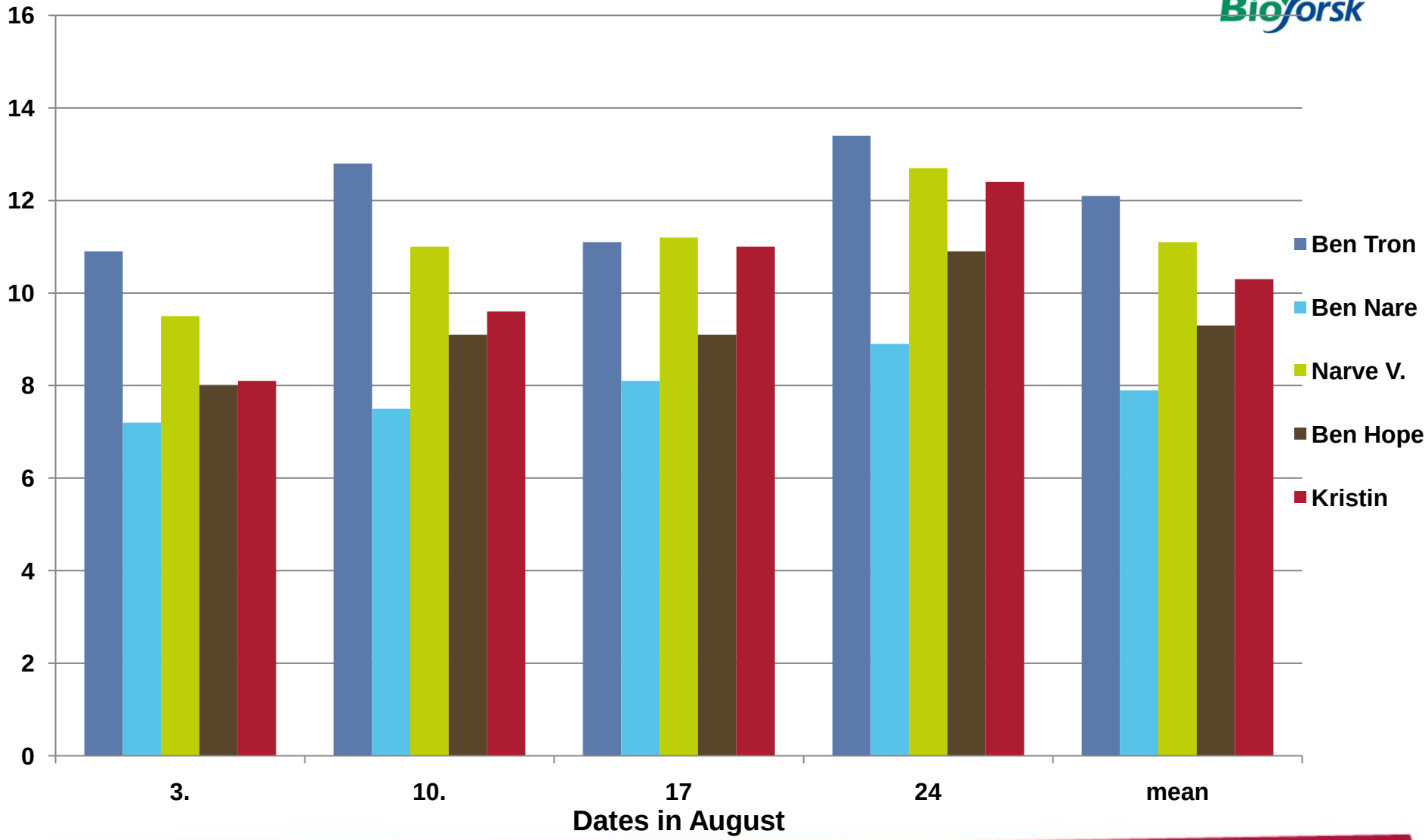
Titreable Acids in Berries of Five Black Currant Cultivars During Ripening in 2009



Vitamin C in Berries of Five Black Currant Cultivars During Ripening in 2009



Antioxidant Capacity in Berries of Five Black Currant Cultivars During Ripening in 2009



Winter- and Spring Frost – a New Challenge

Summary and conclusoins

We still need new cultivars

1. With more Resistance to
   - Pests and deaseses
   - Winter- and Springfrost

2. Strong Bushes and High Crop

3. Better Suited for the Fresh Market