

The physiological realities of *Ribes nigrum*

Anita Sønsteby, Bioforsk
Norway



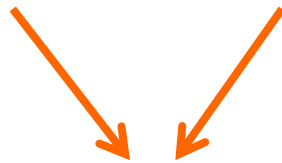
Climate affects black currant strongly

Climate factors:

- Temperature
- Day length

Plant responses:

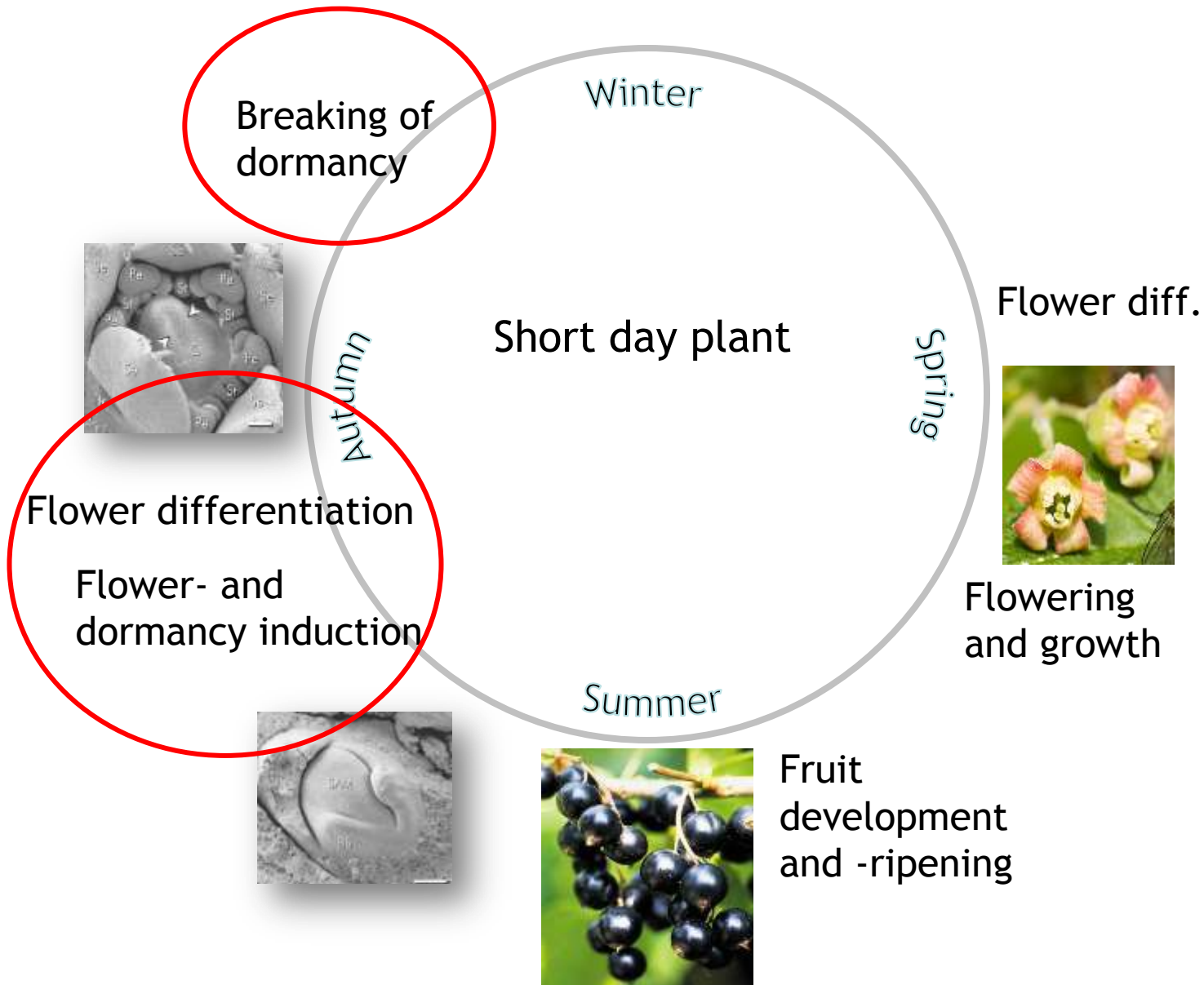
- Bud break
- Shoot growth
- Growth cessation
- Flower initiation
- Dormancy induction
- Breaking of dormancy



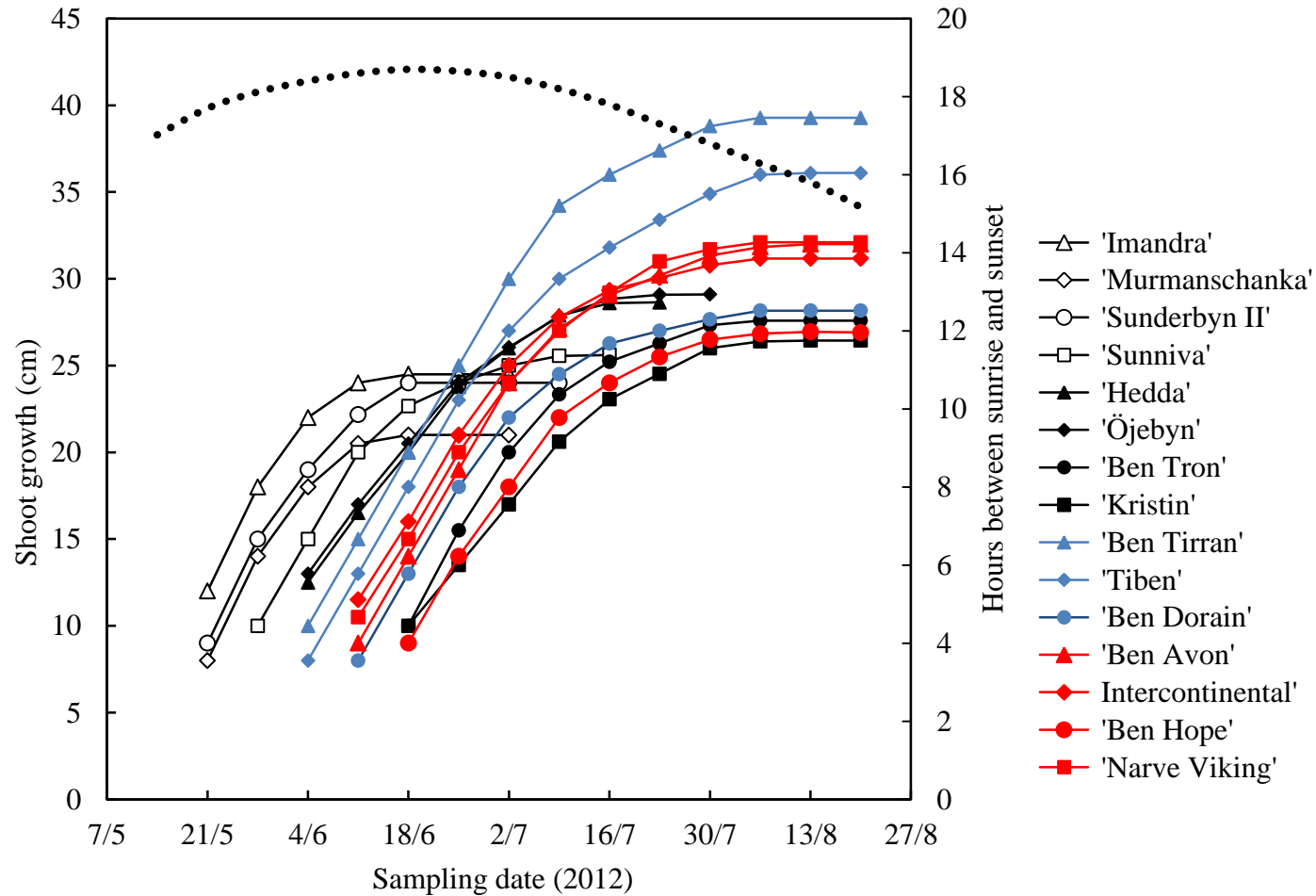
Cultivar differences

(adapted to the environment where they were bred and selected for)





Time courses of shoot elongation growth at 60° N



10°C 5°C 0°C -5°C -10°C -20°C



Breaking of dormancy

Shoots chilled for 14 weeks
at different dormancy
breaking temperatures



Temperature - frost damage



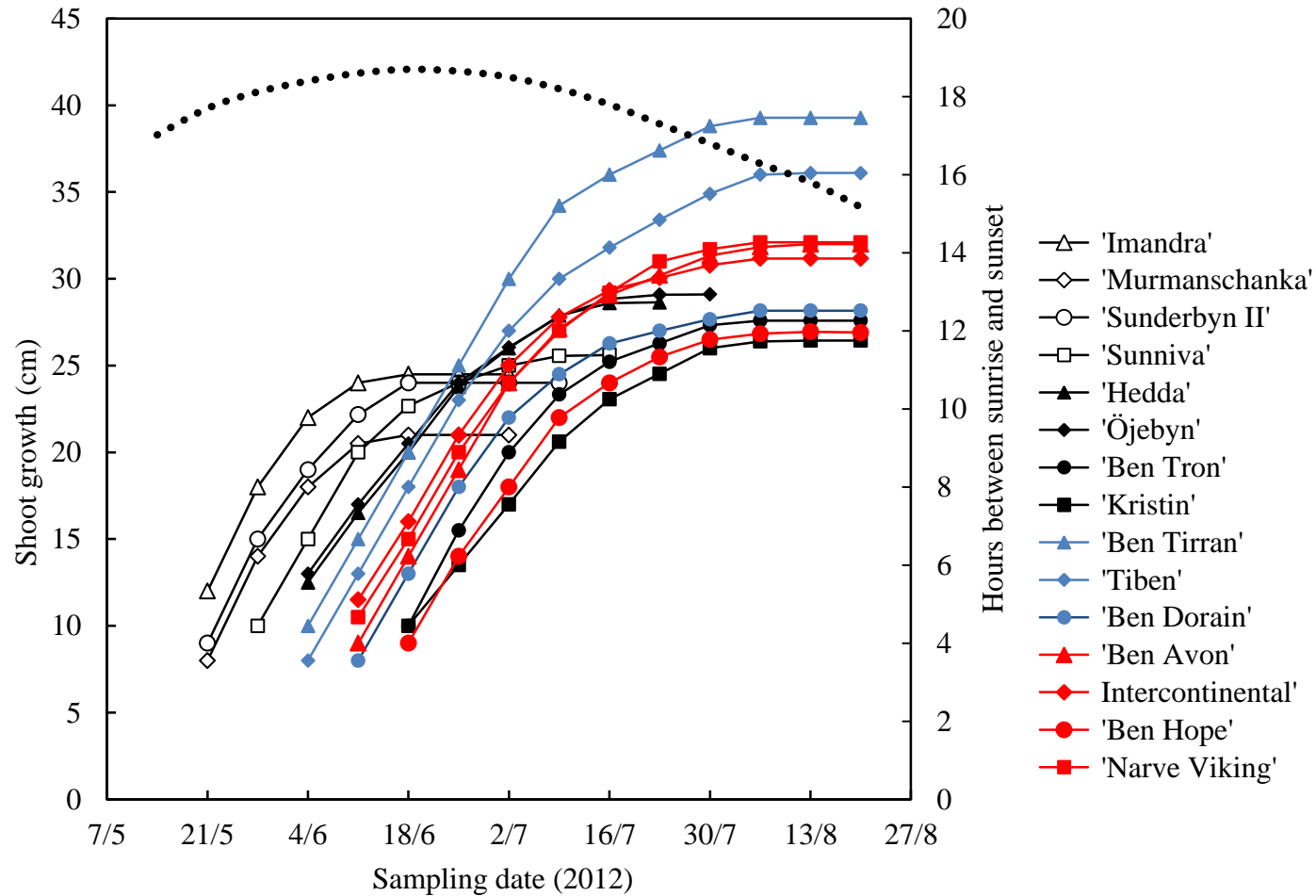
Photo: S. Mogan



Photo: S. Strbac



Time courses of shoot elongation growth at 60 °N



Autumn temp. affects the depth of dormancy



Genetic resources



***Ribes magellanicum* - Chile**



***Ribes nigrum* - Russia**

