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* Photosynthesis and temperature

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EVROPSKÁ UNIE



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MLÁDEŽE A TĚLOVÝCHOVY



OP Vzdělávání
pro konkurenceschopnost

INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

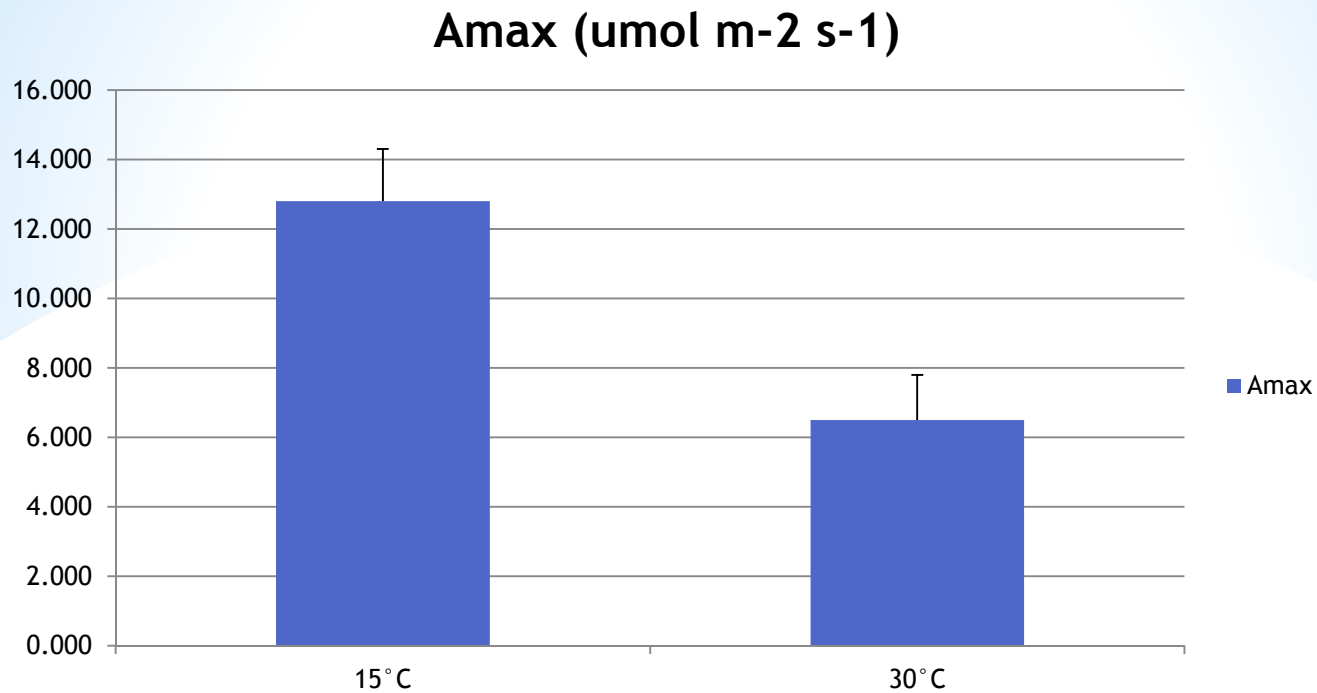
Licor 6400 (IRGA)



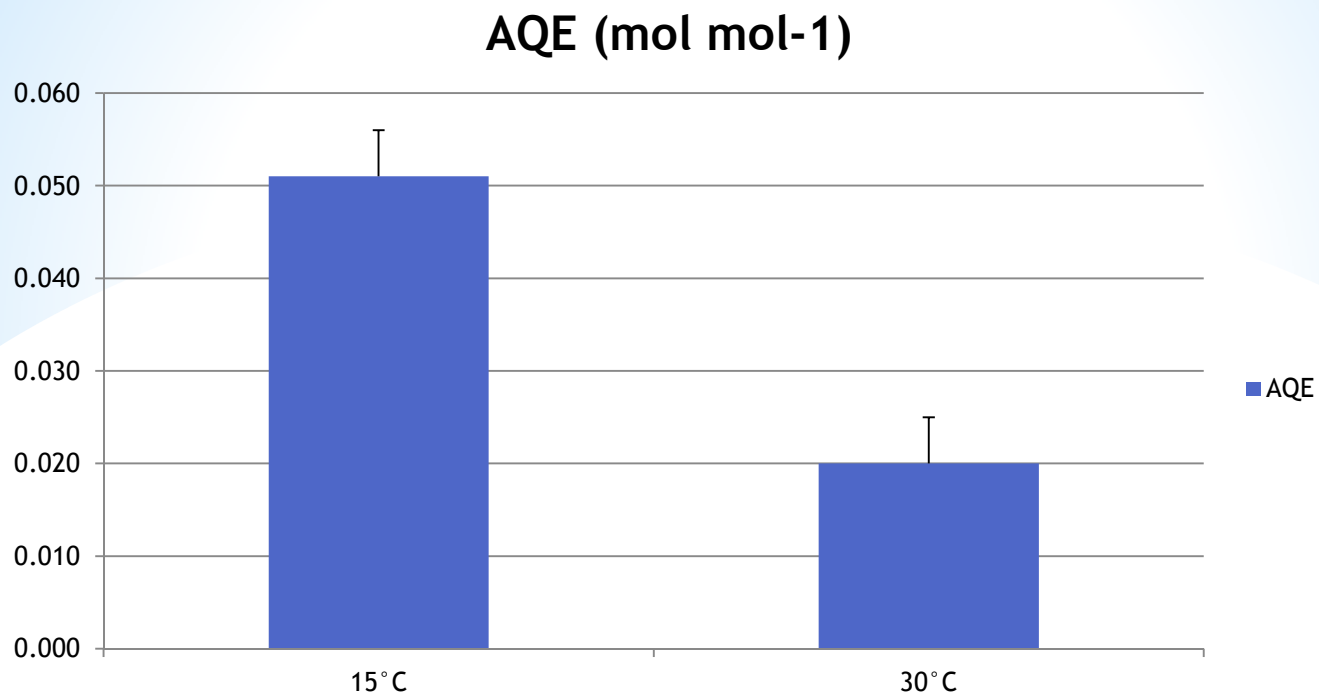
Chamber conditions

- * CO₂ concentration 400 ppm
- * RH 55%
- * temperature 15 or 30 °C
- * PhotosynAssistant -
 - * estimation of A_{max}, A_{QE}, RD
- * Norway spruce (*Picea abies*)

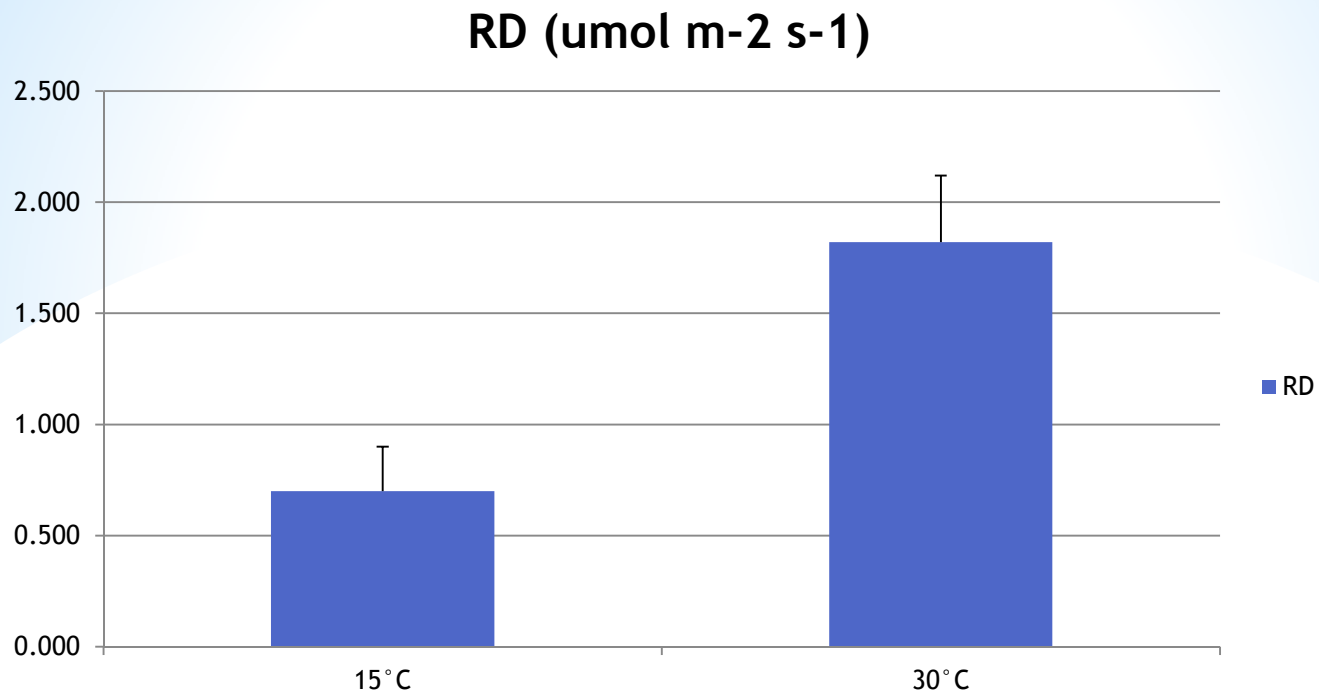
* **Aim: compare photosynthesis at 15 and 30 °C**



* Amax - light-saturated rate of photosynthesis



* AQE - apparent
quantum efficiency



* **Rd - dark respiration**

- * Amax and AQE parameters are higher at 15°C than 30°C

- * stomata closed at high temperature

- * respiration is lower at 15°C

- * lower carbon loss

- * these findings show that:

*** 15°C is better than
30°C for spruce**