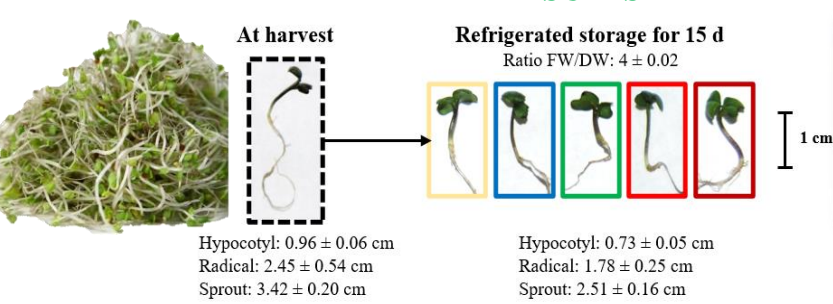
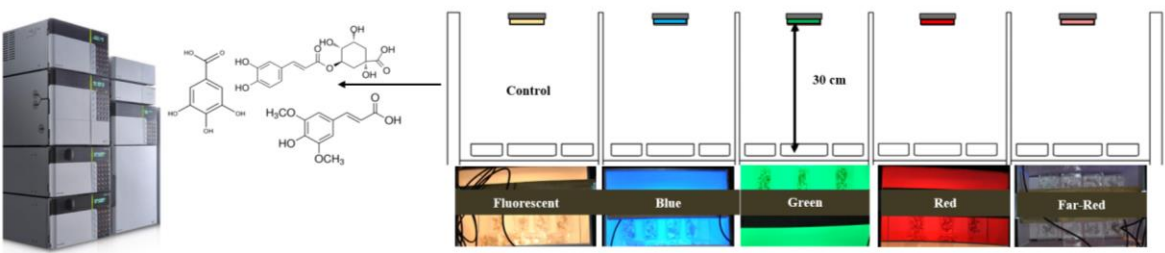




OBJECTIVE
Evaluate during 15 d at 5 °C the morphological and phytochemical content changes in minimally processed broccoli sprouts grown under a photoperiod of 16 h light treatments + 8 h darkness.

MATERIALS AND METHODS

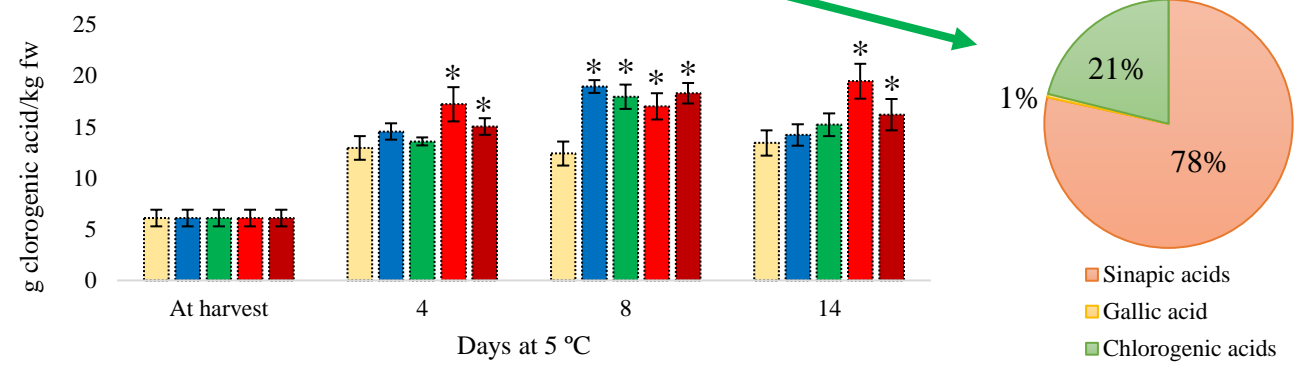


CONCLUSIONS

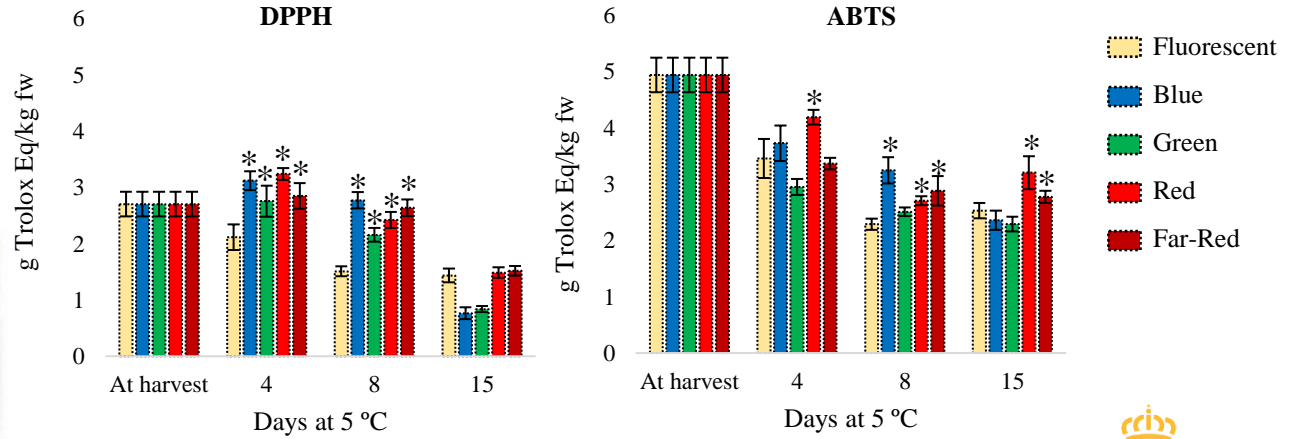
Sprouts under Blue, Green, Red, and Far-Red LED lighting improved the total antioxidant activity by DPPH. Similarly, antioxidant capacity measured by ABTS revealed that just Red LEDs were able to increase the antioxidant ability by 26 % after 15 d at 5°C. These results are in accordance with the increase in the total phenolic compounds, in where Red LEDs illuminated sprouts during 15 d at 5°C showed an increase by 45 % in comparison with Fluorescent and Blue LEDs. In **conclusion**, our results suggest that minimally processed sprouts may benefit from LED lighting during shelf-life in terms of their nutraceutical compounds, especially under Red and Far-Red illumination.

RESULTS

TOTAL PHENOLIC COMPOUNDS



TOTAL ANTIOXIDANT ACTIVITY



*Denotes significant differences compared to Fluorescent (P<0.05)