

Figure S1. Non-standardized absorbance curves for Cr-PC 577 extracted from *Hemiselms pacifica* grown under white, blue, green, and red light of near equal intensity for 13 months after the reset of green lamps during baseline experiments. Dashed line on the right indicates the starting position of the primary absorbance maximum (577-578 nm). Dashed line on the left shows the final position of the primary maximum at 562-563 nm.

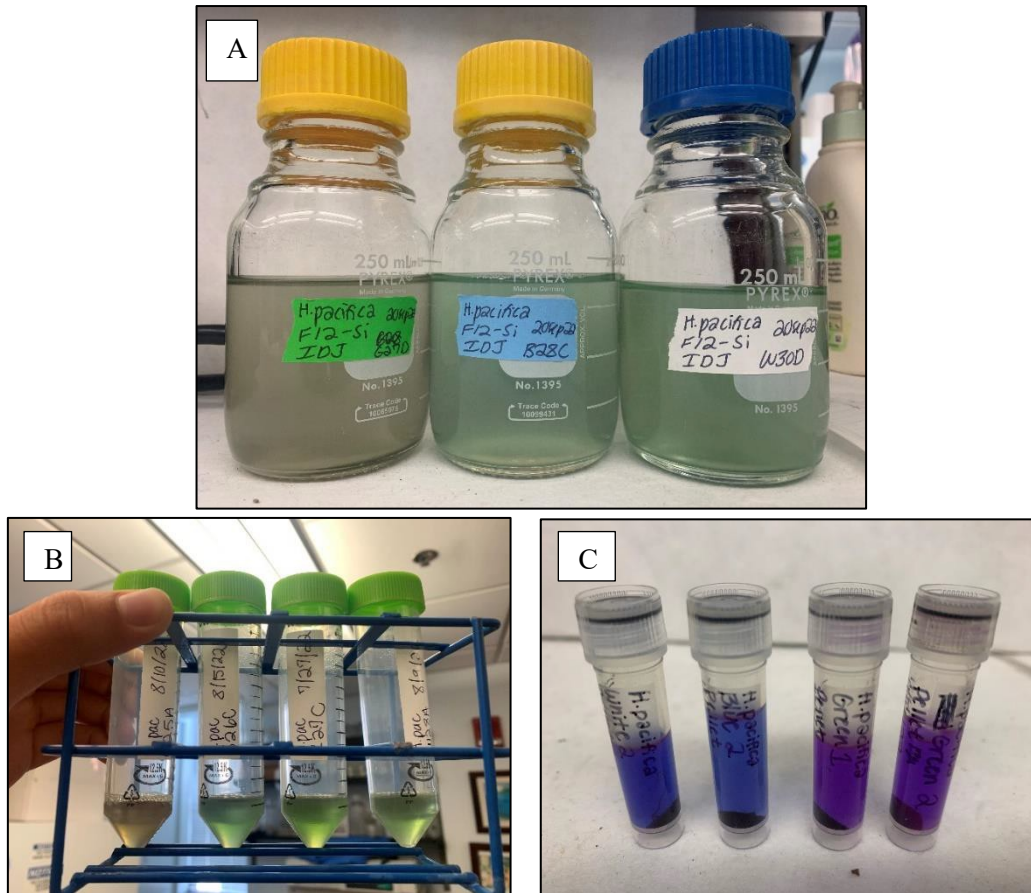


Figure S2. (A) *Hemiselmis pacifica* cultures grown in green, blue, and white light (left to right). (B) Cultures of *H. pacifica* centrifuged at 4500 rpm for 5 minutes, decanted, and added to a phosphate buffer. Light treatments from left to right are green, blue, red, and white. (C) PBPs from *H. pacifica* extracted in phosphate buffer. Light treatments from left to right are white, blue and two vials from green light. Note that these photos are from cultures grown in 2022 but are representative of all cultures from experiments in 2021 and 2022.

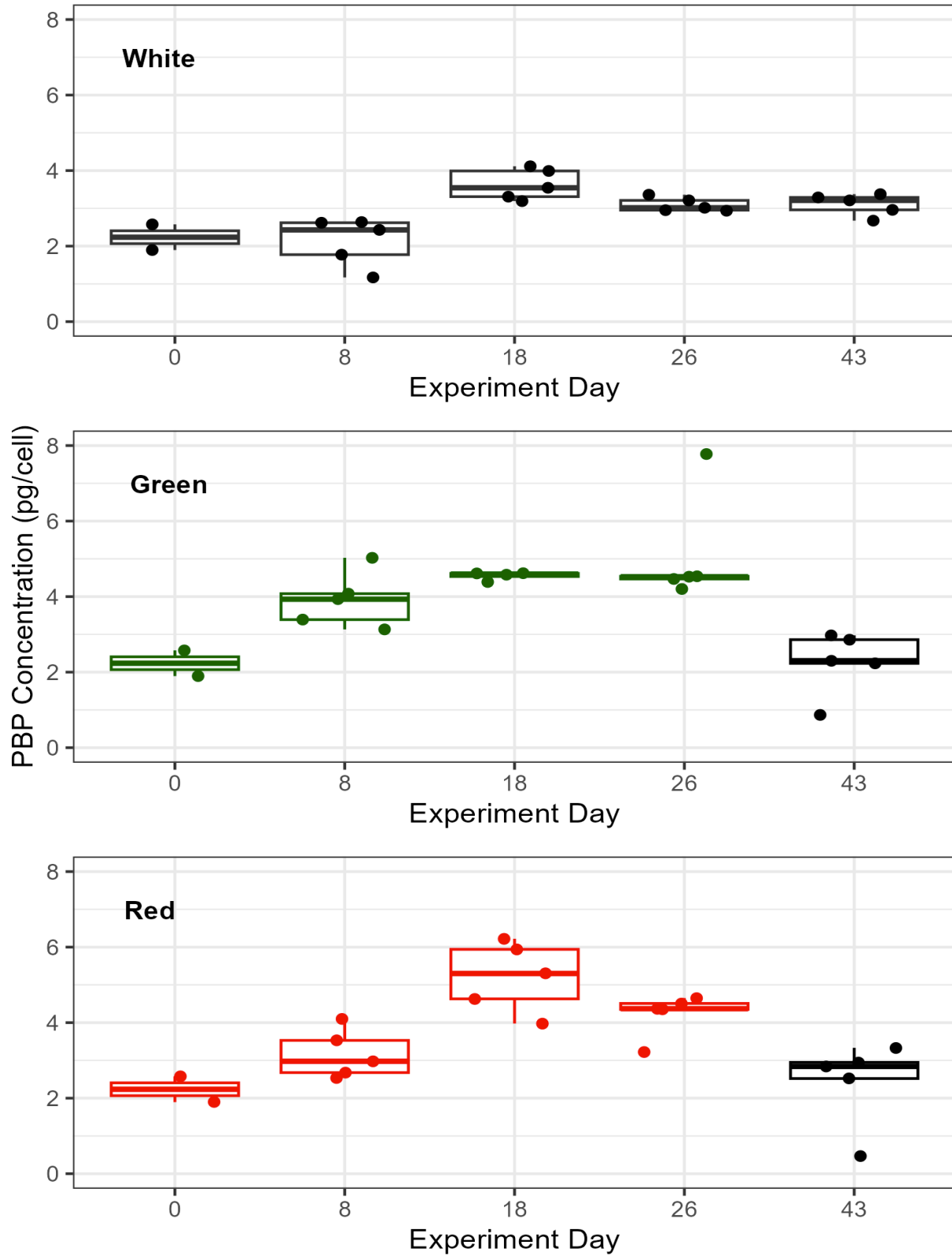


Figure S3. PBP concentrations in units of pg/cell for *Hemiselmis pacifica* grown in white, green, or red light environments then shifted back to white light on Day 43.