The Sunflower Circadian Clock: A Head Turner

Plants are often perceived as immobile. However, circadian biologists, dating back to the French scientist Jean-Jaques de Mairan in the 1700s, knew that plants show daily rhythms of movement. More recently, in an elegant study, the team of Prof. Stacey Harmer from UC Davis, a CCB Associate member, showed that the east to west rotation of young sunflower plants over the course of the day is controlled by an internal circadian clock and helped the young flowers to grow bigger than their sibling plants whose movement was impeded. While young sunflowers rotated their heads to follow the sun, this behavior stopped in adult sunflowers, which faced perpetually east. Adult flowers have evolved to face the rising sun because the warmth helps them to attract pollinators. This study was published in the journal Science and featured in the Los Angeles Times in August of 2016.

LA Times article:

Original article:
http://science.sciencemag.org/content/353/6299/587