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ACCEPTED MANUSCRIPT

Brassica glucosinolate rhythmicity in response to light-dark entrainment cycles is cultivar-dependent

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Highlights

- *Brassica* cultivars keep track the time of the day to coordinate their defenses.
- The period and amplitude of GSLs circadian outputs were cultivar-dependent.
- A robust rhythmic behavior was found for the aliphatic GSLs: SIN and GNA
- The plant clock can be re-entrained for GSLs accumulation after free-running conditions.

ABSTRACT

Coordination of plant circadian rhythms with the external environment provides growth and reproductive advantages to plants as well as enhanced resistance to insects and pathogens. Since glucosinolates (GLSs) play a major role as plant defensive compounds and could affect the palatability and health value of edible crops, the aim of this study

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