عنوان فارسی مقاله:
تنظيم دمای رشد مورفولوژیکی (پدیده شناسی گیاه)

عنوان انگلیسی مقاله:
Temperature regulation of plant phenological development

توجه!
این فایل تنها قسمتی از ترجمه میباشد. برای تهیه مقاله ترجمه کامل با فرمت ورد (قابل ویرایش) همراه با نسخه انگلیسی مقاله، اینجا کلیک کنید.
4. Future outlook and concluding remarks

The concurrent perception of temperature change with an array of thermosensors and differential responses during plant growth and developmental stages make temperature-induced signaling dynamically complex. Plants exhibiting large but opposing sensitivities to day and night temperature have been highlighted (Lobell and Ortiz-Monasterio, 2007; Welch et al., 2010). For instance, high night temperature-induced decline in overall biomass, nitrogen, and nonstructural carbohydrate partitioning reduced rice yield and grain quality (Shi et al., 2013), compared with increased spikelet sterility induced by high day temperature (Jagadish et al., 2010). Further, the contribution of the amplitude of daily variation of 15°C (32.5/17.5°C) can increase carbon-use efficiency in mature leaves and roots of orange trees, leading to increased leaf area index and photosynthetic rates compared with 0°C (25/25°C) daily variation (Bueno et al., 2012). On the other hand, temperature at the plant canopy or flower bud can be considerably different from the air temperature and is strongly dependent on the microclimate surrounding these critical plant organs, influencing flowering time and subsequent reproductive processes (Julia and Dingkuhn, 2013).