1. Record Nr. UNINA9910346750503321 Autore Emily A. Heaton Titolo Optimizing Miscanthus for the Sustainable Bioeconomy: From Genes to **Products** Frontiers Media SA, 2018 Pubbl/distr/stampa Descrizione fisica 1 electronic resource (230 p.) Collana Frontiers Research Topics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia In this Research Topic we report advances in fundamental and applied Sommario/riassunto aspects of the perennial C4 bioenergy crop Miscanthus (Miscanthus spp.) and its role in mitigating climate change as part of the bioeconomy. Miscanthus is extremely well suited for bioenergy, biofuel and bioproduct production over a wide geographic area including Europe and North America as well as its native Asia. Miscanthus offers a unique perspective within plant science: the challenge is to domesticate this novel crop for diverse environments and uses while simultaneously developing sustainable value chains to displace fossil fuels and contribute to climate change mitigation. Contributions to this Research Topic were offered from leading Miscanthus researchers from different parts of the world. We accepted 16 articles from 95 authors, which have generated 21,161 views at March 26 2018. Nine of the articles are the output of the European FP7 OPTIMISC project and describe multiple experiments investigating a common set of Miscanthus genotypes in Europe and Asia. These papers are complemented by seven additional articles from global authors, providing a comprehensive analysis of the state of the

art of Miscanthus research and application.