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Titolo	Sugarcane : physiology, biochemistry, and functional biology / / edited by Paul H. Moore, Frederik C. Botha
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Altri autori (Persone)	MoorePaul H BothaF. C <1953-> (Frederik Coenraad)
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Sugarcane: the crop, the plant, and domestication -- Anatomy and morphology -- Developmental stages (phenology) -- Ripening and postharvest deterioration -- Mineral nutrition of sugarcane -- Photosynthesis in sugarcane -- Respiration as a competitive sink for sucrose accumulation in sugarcane culm: perspectives and open questions -- Nitrogen physiology of sugarcane -- Water relations and cell expansion of storage tissue -- Water, transpiration, and gas exchange -- Transport proteins in plant growth and development -- Phloem transport of resources -- Cell walls: structure and biogenesis -- Hormones and growth regulators -- Flowering -- Stress physiology: abiotic stresses -- Mechanisms of resistance to pests and pathogens in sugarcane and related crop species -- Source and sink physiology -- Biomass and bioenergy -- Crop models -- Sugarcane yields and yield-limiting processes -- Systems biology and metabolic modeling -- Sugarcane genetics and genomics -- Sugarcane biotechnology: axenic culture, gene transfer, and transgene expression.
Sommario/riassunto	Physiology of Sugarcane looks at the development of a suite of well-established and developing biofuels derived from sugarcane and cane-

based co-products, such as bagasse. Chapters provide broad-ranging coverage of sugarcane biology, biotechnological advances, and breakthroughs in production and processing techniques. This single volume resource brings together essential information to researchers and industry personnel interested in utilizing and developing new fuels and bioproducts derived from cane crops.