

1. Record Nr.	UNINA9910705789203321
Autore	Kulkarni Sameer
Titolo	Progress of high efficiency centrifugal compressor simulations using TURBO // Sameer Kulkarni, Timothy A. Beach
Pubbl/distr/stampa	Cleveland Ohio : , : National Aeronautics and Space Administration, Glenn Research Center, , March 2017
Descrizione fisica	1 online resource (22 pages) : color illustrations
Collana	NASA/TM ; ; 2017-219418
Soggetti	Applications programs (computers) Centrifugal compressors Computational fluid dynamics Computational grids Impellers Turbomachinery
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"March 2017."
Nota di bibliografia	Includes bibliographical references (page 22).

2. Record Nr.	UNINA9910821418003321
Titolo	The plant hormone ethylene // edited by Michael T. McManus
Pubbl/distr/stampa	Chichester, West Sussex ; ; Ames, Iowa, : Wiley-Blackwell, 2012
ISBN	9786613616432 9781280586606 1280586605 9781118223079 1118223071 9781118223086 111822308X 9781118223109 1118223101
Edizione	[1st ed.]
Descrizione fisica	1 online resource (434 p.)
Collana	Annual plant reviews ; ; v. 44
Altri autori (Persone)	McManusMichael T
Disciplina	571.7/42
Soggetti	Ethylene Plant hormones
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	ANNUAL PLANT REVIEWS VOLUME 44; Contents; List of Contributors; Preface; 1 100 Years of Ethylene - A Personal View; 1.1 Introduction; 1.2 Ethylene biosynthesis; 1.3 Ethylene perception and signalling; 1.4 Differential responses to ethylene; 1.5 Ethylene and development; 1.6 Looking ahead; Acknowledgements; References; 2 Early Events in the Ethylene Biosynthetic Pathway - Regulation of the Pools of Methionine and S-Adenosylmethionine; 2.1 Introduction; 2.2 The metabolism of Met and SAM; 2.3 Regulation of de novo Met synthesis; 2.4 Regulation of the SAM pool 2.4.1 Regulation of SAMS genes by ethylene and of SAMS enzyme activity by protein-S-nitrosylation 2.5 The activated methyl cycle; 2.6 The S-methylmethionine cycle; 2.7 The methionine or Yang cycle; 2.7.1 The Yang cycle in relation to polyamine and nicotianamine biosynthesis; 2.7.2 Regulation of the Yang cycle in relation to ethylene

synthesis; 2.8 Conclusions; Acknowledgement; References; 3 The Formation of ACC and Competition Between Polyamines and Ethylene for SAM; 3.1 Introduction; 3.2 Identification and characterization of ACC synthase activity in plants; 3.2.1 Historical overview  
3.2.2 Purification and properties of the ACC synthase protein  
3.3 Analysis of ACC synthase at the transcriptional level; 3.3.1 Molecular cloning of ACC synthase genes; 3.3.2 Transcriptional regulation of the ACC synthase gene family; 3.4 Post-transcriptional regulation of ACS; 3.4.1 Identification and characterization of interactions with ETO1; 3.4.2 Regulation of ACS degradation; 3.5 Does ACC act as a signal?; 3.6 Biosynthesis and physiology of polyamines; 3.6.1 SAM is a substrate for polyamines; 3.6.2 Physiology of polyamine effects in vitro and in vivo  
3.6.3 Concurrent biosynthesis of ethylene and polyamines  
3.6.4 Do plant cells invoke a homeostatic regulation of SAM levels?; Acknowledgements; References; 4 The Fate of ACC in Higher Plants; 4.1 Introduction; 4.2 History of the discovery of ACC oxidase as the ethylene-forming enzyme; 4.2.1 Early characterization of ACC oxidase; 4.2.2 Cloning of the ethylene-forming enzyme as an indicator of enzyme activity; 4.2.3 Initial biochemical demonstration of ethylene-forming enzyme activity in vitro; 4.3 Mechanism of the ACC oxidase-catalyzed reaction; 4.3.1 Investigation of the ACO reaction mechanism  
4.3.2 Metabolism of HCN  
4.3.3 Evidence of the conjugation of ACC; 4.4 Transcriptional regulation of ACC oxidase; 4.4.1 ACO multi-gene families; 4.4.2 Differential expression of members of ACO multi-gene families in response to developmental and environmental stimuli; 4.4.3 Transcriptional regulation of ACO gene expression; 4.4.4 Crosstalk between ethylene signalling elements and ACO gene expression; 4.5 Translational regulation of ACC oxidase; 4.6 Evidence that ACC oxidase acts as a control point in ethylene biosynthesis; 4.6.1 Cell-specific expression of ACC oxidase  
4.6.2 Differential expression of ACS and ACO genes

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### Sommario/riassunto

The plant hormone ethylene is one of the most important, being one of the first chemicals to be determined as a naturally-occurring growth regulator and influencer of plant development. It was also the first hormone for which significant evidence was found for the presence of receptors. This important new volume in Annual Plant Reviews is broadly divided into three parts. The first part covers the biosynthesis of ethylene and includes chapters on S-adenosylmethionine and the formation and fate of ACC in plant cells. The second part of the volume covers ethylene signaling, including th

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