

1. Record Nr.	UNINA9910830778803321
Titolo	Food flavour technology [[electronic resource] /] / edited by Andrew J. Taylor and Robert S.T. Linforth
Pubbl/distr/stampa	Ames, IA, : Blackwell, 2010
ISBN	1-282-47219-4 9786612472190 1-61344-882-1 1-4443-1777-6 1-4443-1778-4
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (378 p.)
Altri autori (Persone)	TaylorA. J <1951-> (Andrew John) LinforthRobert S. T
Disciplina	664.07 664.5
Soggetti	Flavor Flavoring essences Flavor - Analysis
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	Food Flavour Technology; Contents; List of contributors; Preface; 1 Creating and formulating flavours; 1.1 Introduction; 1.1.1 A little history; 1.2 Interpreting analyses; 1.3 Flavour characteristics; 1.3.1 Primary characters; 1.3.2 Secondary characteristics; 1.3.3 Taste effects; 1.3.4 Complexity; 1.3.5 Flavour balance; 1.3.6 Unfinished work; 1.4 Applications; 1.4.1 Ingredient factors; 1.4.2 Processing factors; 1.4.3 Storage factors; 1.4.4 Consumption factors; 1.5 Flavour forms; 1.5.1 Water-soluble liquid flavours; 1.5.2 Clear water-soluble liquid flavours; 1.5.3 Oil-soluble liquid flavours 1.5.4 Emulsion-based flavours 1.5.5 Dispersed flavours; 1.5.6 Spray-dried flavours; 1.6 Production issues; 1.7 Regulatory affairs; 1.8 A typical flavour; 1.9 Commercial considerations; 1.9.1 International tastes; 1.9.2 Abstract flavours; 1.9.3 Matching; 1.9.4 Customers; 1.10 Summary; References; 2 Flavour legislation; 2.1 Introduction; 2.2 Methods of legislation; 2.3 Legislation in the United States; 2.4

International situation: JECFA; 2.5 Council of Europe; 2.6 European community; 2.6.1 Background - national to EU legislation; 2.6.2 The 1988 Council Directive
2.6.3 Smoke flavourings 2003 Directive 2.6.4 Developments 2008 onwards; 2.7 Current EU Situation and the future; References; 3 Basic chemistry and process conditions for reaction flavours with particular focus on Maillard-type reactions; 3.1 Introduction; 3.2 General aspects of the Maillard reaction cascade; 3.2.1 Intermediates as flavour precursors; 3.2.2 Carbohydrate fragmentation; 3.2.3 Strecker degradation; 3.2.4 Interactions with lipids; 3.3 Important aroma compounds derived from Maillard reaction in food and process flavours; 3.3.1 Character-impact compounds of thermally treated foods 3.3.2 Character-impact compounds of process flavours 3.4 Preparation of process flavours; 3.4.1 General aspects; 3.4.2 Factors influencing flavour formation; 3.4.3 Savoury process flavours; 3.4.4 Sweet process flavours; 3.5 Outlook; References; 4 Biotechnological flavour generation; 4.1 Introduction; 4.2 Natural flavours: market situation and driving forces; 4.3 Advantages of biocatalysis; 4.4 Micro-organisms; 4.4.1 Biotransformation and bioconversion of monoterpenes; 4.4.2 Bioconversion of C13-norisoprenoids and sesquiterpenes; 4.4.3 Generation of oxygen heterocycles 4.4.4 Generation of vanillin, benzaldehyde and benzoic compounds 4.5 Generation of miscellaneous compounds; 4.5 Enzyme technology; 4.5.1 Liberation of volatiles from bound precursors; 4.5.2 Biotransformations; 4.5.3 Kinetic resolution of racemates; 4.6 Plant catalysts; 4.6.1 Plant cell, tissue and organ cultures; 4.6.2 Callus and suspension cultures; 4.6.3 Organ cultures; 4.6.4 Plant cell biotransformations; 4.7 Flavours through genetic engineering; 4.7.1 Genetically modified micro-organisms; 4.7.2 Isolated enzymes from genetically modified micro-organisms; 4.7.3 Plant rDNA techniques 4.8 Advances in bioprocessing

Sommario/riassunto

Food flavour technology is of key importance for the food industry. Increasingly, food products must comply with legal requirements and conform to consumer demands for "natural" products, but the simple fact is that, if foods do not taste good, they will not be consumed and any nutritional benefit will be lost. There is therefore keen interest throughout the world in the production, utilisation and analysis of flavours. The second edition of this successful book offers a broad introduction to the formulation, origins, analysis and performance of food flavours, updating the original chapter
