



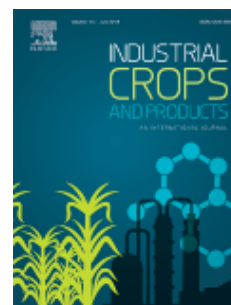
# INDUSTRIAL CROPS AND PRODUCTS

An International Journal

## AUTHOR INFORMATION PACK

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### DESCRIPTION

*Industrial Crops and Products* is an International Journal publishing academic and industrial research on industrial (**defined as non-food/non-feed**) crops and products. Papers concern both crop-oriented and bio-based materials from crops-oriented research, and should be of interest to an international audience, hypothesis driven, and where comparisons are made statistics performed. The following are examples of research that fit within the scope of the journal.

The emphasis must be on plants. Non-plant research, for instance animal, algae, microorganisms, and medical oriented research are not within the scope of the journal. 2. Non-food/non-feed products (bio-based materials) from specific crops. Food/feed uses can be mentioned, but the majority of data and emphasis in the Discussion must be on non-food/non-feed uses of plants and plant products. Cultural practices to improve production of industrial crops and products. Experiments should be run at least twice, whether performed in the field, greenhouse, growth chamber, and in tissue culture or micropropagation, to account for environmental variation and/or genotype x environment interactions. Germplasm development and breeding of industrial crops. New or alternative crops with potential industrial uses. a. The manuscript should include an evaluation of the real potential to make a plant an industrial crop, not just information on plants gathered in natural habitats (many plants make products, but they will not become a crop). An economic analysis may be included as appropriate. b. *Industrial Crops and Products* is a crop oriented journal; these can be field crops, horticultural crops, or forest crops, but they must be managed, not just collected natural stands. The focus should be on agricultural production as an end result. Plant products, tied to specific crops/plants, and their modification to meet new industrial uses. For instance, for nanoparticles, a direct link is required with an industrial crop or with the respective value-chain. Testing industrial uses of specific plant products. Processing research to improve recovery of specific plant products.

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Scientists in the areas of agronomy, crop protection, post-harvest and processing research, product testing and evaluation, distribution, marketing and economics.

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 in vitro morphogenesis, tissue culture and genetic transformation in plants of economic and medicinal importance; characterization of regenerated plants using molecular markers and flow cytometry and also the estimation of genetic diversity using DNA-based markers.

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 Food Chemistry; Natural Products; Nutraceuticals; Functional Foods; Natural ingredients/additives

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 Chemistry of vegetal biomass; furan and furanics

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 Agronomy of oilseed crops (e.g. influence of agronomic practices and environment on crop growth and yield, including seed oil content and composition); crop water use; photosynthesis; plant carbohydrate metabolism and usage

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 Molecular biology; Protein detection methods; Food safety; Food contaminants and Protein toxins

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 medicinal and nutraceuticals; antioxidants; waxes; resins; latices; guayule and phytochemicals of the plants of the semiarid lands

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Fibres and fibre compounds; natural fibres-based composites; waxes; resins; gums; rubber and other polymers; composites and reconstituted products; energy and chemicals from forest biomass; non-wood forest products; adhesives for wood; bonding strength; contact angles; adhesion by chemical bonding; mechanical properties of adhesives; surface roughness/morphology; wood-based composite materials and their applications.

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particle boards; wood; wood adhesive; nanocellulose; cellulosic composites; adhesion; interface properties; bio-based adhesives

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pulping; lignin; bleaching; biorefinery from lignocellulosics

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Natural Products from Plants; Analytical Techniques; Antioxidants; Enzymatic Assays; Encapsulation and Ingredients

**D. Pasquini**, Universidade Federal de Uberlândia (UFU), Uberlandia MG, Brazil

vegetal macromolecules; cellulosic fibers; composites; nanocellulose; nanocomposites; polymers from renewable sources

**R. Pavela**, Crop Research Institute, Prague, Czech Republic

botanical insecticides

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Aromatic plants; Medicinal plants; Essential oils; Natural products; Antioxidant activity; Bioactivity

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oil seed crops; plant breeding; genetics; agronomy; GC oil analysis

**A. Pizzi**, Université Henri Poincaré (Nancy I), Epinal Cedex 9, France

particle boards; wood; wood adhesive

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**D.T. Ray**, University of Arizona, Tucson, Arizona, USA

**C. Regnault-Roger**, Université de Pau et des Pays de l'Adour, Pau Cedex, France

natural Insecticides; essential oils; plant chemistry

**R. Roseberg**, Oregon State University, Klamath Falls, Oregon, USA

soil science; agronomic aspects of crop production

**H. Ruiz**, Autonomous University of Coahuila, Saltillo-Coahuila, Mexico

renewable energy, specifically in biorefinery process and bioethanol production of second generation using lignocellulosic materials (agricultural residues), hydrothermal process (autohydrolysis), simultaneous saccharification and bioethanol fermentation and modeling of enzymatic hydrolysis.

**A.J.D. Silvestre**, Universidade de Aveiro, Aveiro, Portugal

extractives; GC-MS

**D. Turley**, National Non-Food Crops Centre, York, England, UK

non food crops in general; economic aspects; processing; rural strategies; agronomy of non-food crops; biofuels and bioenergy applications; bio-based materials

**E.A. Turumtay**, Recep Tayyip Erdoğan University, Rize, Turkey

Modern Liquid Chromatography Techniques; Chromatographic Analysis of Plant Based Natural Products; Phenolic Profiling; Spectroscopic Assays for Antioxidant Properties of Plant Extracts; Traditional and Modern Extraction Techniques for Bio-active compounds from Medicinal Plants; Determination of Anticancer Activities of The Natural Compounds on some Cancer Cell lines and animal models

**P. Velmurugan**, Chonbuk National University, Jeonbuk, The Republic of Korea

**G. Wang**, University of Arizona, Maricopa, Arizona, USA

crop production, nutrient management, crop rotation, and tillage management.

**J. B. Xiao**, University of Macau, Taipa, Macau, China

Medicinal plants, polyphenols, flavonoids, natural products, bioactivity, antioxidants Food Nutrition Food Chemistry

## GUIDE FOR AUTHORS

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### INTRODUCTION

*Industrial Crops and Products*, an International Journal, publishes papers reporting the results of original research, short communications and critical reviews on all aspects of industrial crops and products (defined as non-food/non-feed uses of plants and plant products). This covers a wide range of aspects of cultivation, crop improvement, crop compounds, processing, and integrated chain control, all focusing on the exploitation of agricultural crops for industrial use.

The scope of the journal covers a vast range of crops and research disciplines. Crops should contain significant renewable resources such as:

- Fibres and fibre compounds
- Carbohydrates
- Oils and fatty acids
- Waxes, resins, gums, rubber, and other polymers
- Proteins
- Essential oils for ink, lubricants, plastics, cosmetics
- Biologically active compounds for pharmaceutical, herbicides and insecticides, and preservatives.

Some examples of industrial (non-food/non-feed uses) crops are agave, cassava, crambe, cuphea, elephant grass, fibre hemp, flax, guar, guayule, jojoba, kenaf, lesquerella, maize, meadowfoam, oil palm, peas, plantago, potato, pyrethrum, rape seed, safflower, soybean, Stokes aster, sugar beet, sunflower, vernonia, and wheat.

Papers within the above indicated frame-work will be accepted if they cover or integrate research on:

- Agronomic production and modelling
- Breeding, genetics, and biotechnology
- Post-harvest treatment and storage
- (Bio)process technology
- (Bio)chemistry
- Product testing, development, and marketing
- Economics, and systems analysis and optimization

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2. Review articles
3. Short Communications
4. Book Reviews

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*A Short Communication* is a concise but complete description of a limited investigation, which will not be included in a later paper. Short Communications should be as completely documented, both by reference to the literature and description of the experimental procedures employed, as a regular paper. They should not occupy more than 4 printed pages (about 8 manuscript pages, including figures, tables and references).

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