INDUSTRIAL CROPS AND PRODUCTS

An International Journal

AUTHOR INFORMATION PACK

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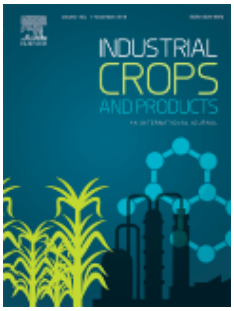

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DESCRIPTION

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. 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.
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oil seed crops; plant breeding; genetics; agronomy; GC oil analysis
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Lignocellulosic agricultural crop; Pretreatment; Cellulose; Hemicellulose; Lignin; Conversion; Biofuels; Chemicals; Biomaterials
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soil science; agronomic aspects of crop production
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Renewable energy, specifically in biorefinery process and bioethanol production of second generation using lignocellulosic materials (agricultural residuos); Hydrothermal process (autohydrolysis); Simultaneous saccharification; Bioethanol fermentation and modeling of enzymatic hydrolysis
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P.C. Stevenson, University of Greenwich, Chatham, UK
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V.K. Thakur, Cranfield University, Cranfield, England, UK

Bio-Renewable Materials; Cellulose Fibres; Bio-Resins; Lignin; Membrane; Agricultural biomass; Hydrogels; Polymer Composites; Nanocomposites; Green Synthesis of Nanomaterials

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

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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

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J.J. Villaverde, Instituto Nacional de Investigación Agropecuaria (INIA), Madrid, Spain

Pesticides; Environmental Technology; Biorefineries; Analytical methods; Biomimetic processes; Catalytic processes; Informatics; Computational quantum chemistry; Quantitative structure-activity relationships; Statistical modeling

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Coproducts; Fibre; Antioxidant; Antibacterial; Foods

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

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Biomass-based Materials; Cellulose; Hemicellulose; Chitosan; Fiber; Hydrogel; Film; Aerogel; Paper

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

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Plant cell wall Polysaccharides; Biomass processing and fractionation; Carbohydrate chemistry; Wood chemistry; Cellulose; Biobased, biopolymer; Biorefinery

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Oilseed crops; Lignocellulosic crops; Biobased uses; Crop physiology; Abiotic stresses; Natural rubber

GUIDE FOR AUTHORS

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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