**DESCRIPTION**

*Industrial Crops and Products* is an International Journal publishing research on cultivated plants (crops) of industrial interest (non-food, non-feed). Papers concern both crop-oriented and bio-based materials research. It should be of interest to an international audience, hypothesis driven, and repeatable. Crops and products of interest include: fiber, forest, and energy crops, industrial oilseeds, rubber and resins, and cultivated medicinal and aromatic plants. The plant(s) in the manuscript must fit our definition of industrial crops, before it is classified further in research topics as indicated below.

Research on food, phytochemistry, ethnobotany, and medicine are not in the scope of the journal. Authors should make clear in the cover letter how the research fits our scope following the detailed scope description below.

The following are examples of research that fits within the scope of the journal:

Industrial crop management practices to increase productivity and specific chemical components. Including cultural practices (sowing, plant density, fertilization, pruning, shading, management of wild stands for sustainable harvest, pests and weed management, harvest, post-harvest, etc.). Breeding and genetics of cultivated industrial crops. The research must be of international interest and hypothesis driven. The research must be of value to other breeders and the germplasm developed must be available to other researchers for further genetic improvement. Response of cultivated industrial crops to abiotic (temperature, water, salinity, pH, heavy metals, etc.) and biotic stresses (insects, diseases, weeds). Sustainable cropping systems including an industrial crop to reduce negative environmental impacts of conventional cropping systems. For example, cultivation in marginal lands, intercropping, double or relay cropping, cover cropping or other systems intended to minimize soil erosion, eutrophication, greenhouse gases emissions, loss of biodiversity, etc. New techniques for the propagation of industrial crops or production of metabolites in vitro (root and tissue culture, micropropagation). Discovery or development of new industrial crops is in the scope, but must 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. Extraction methods of metabolites from industrial crops and waste streams of industrial crops processing (non-food related). Biochemical and thermochemical conversion of lignocellulosic biomass. Bio-based materials: Fiber and fiber compounds: cellulose-, hemicelluloses-and lignin-based products, textiles, nanofibers, composites, films, etc. Other crop-polysaccharides based materials such as carbohydrates and proteins-based products not intended for the food industry (adhesives, varnishes, paints, etc.)

Rubber, waxes, resins, gums from crops Polymers from crops Crop and forestry biorefinery: Energy
crops: fuel (bioethanol, biogas, syngas), biochar, chemicals, etc. Oils, fatty acids, biofuels (biodiesel, jet fuel, drop-in fuels), and chemicals derived from oilseed crops Biologically active compounds: Insecticides, herbicides, fungicides, and pharmaceuticals (the species has to fit our definition of industrial crop; cultivated plants or plants with demonstrated potential to be cultivated with non-food purposes) Essential oils: inks, dyes, lubricants, perfumes, cosmetics, plastics, and other industrial applications Bio-based products must be 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. In the manuscript, all species must include the Latin name and Authority, the first time the species is mentioned in the abstract or text.

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AUDIENCE

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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Starch, thermoplastic starch, polymers and monomers from renewable resources, cellulose fibers and nanofibers

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Conversion of biomass into biofuels and other added-value products, Techno-economic and environmental issues related to the development of the biorefinery concept

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Crop breeding and genetics, Plant genetic resources conservation and management, Oilseed crops, New industrial crops

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Crops for biomass and biofuels, agronomy, improvement and processing

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Oilseeds, plant genetic resources, new industrial crop breeding.

R.L. Evangelista, USDA-ARS National Center for Agricultural Utilization Research, Peoria, Illinois, United States of America
Postharvest handling of crops, crop processing, oilseed processing, vegetable oil refining, plant oil characterization, seed protein characterization

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Phytoremediation, Energy crops, EIA, Food technology

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

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Cellulose nanomaterials, Nanocomposites, Polymers, Characterization, Byproducts, Nanocellulose, Supramolecular, Unctional, Implanted materials, Biomaterials

A. Gandini, University of Aveiro, Aveiro, Portugal
Chemistry of vegetal biomass, furan and furanics

R. Gesch, USDA-ARS Soil Management Research, Morris, Minnesota, United States of America
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

M. Ghorbanpour, Arak University, Faculty of Agriculture and Natural Resources, Arak, Iran
Phytonanotechnology, Bioavailability of emerging contaminants, Environmental stresses impacts on plant growth and metabolism, Natural products and bioactive compounds of aromatic medicinal plants

X. He, USDA-ARS Foodborne Toxin Detection and Prevention Research, Albany, California, United States of America
Molecular biology, Protein detection methods, Food safety, Food contaminants and Protein toxins

M.A. Jackson, USDA-ARS National Center for Agricultural Utilization Research, Peoria, Illinois, United States of America
Catalytic conversion of fats and oils

D. Jasso de Rodriguez, Antonio Narro Agrarian Autonomous University, Saltillo, Mexico
medicinal and nutraceuticals, antioxidants, waxes, resins, latices, guayule and phytochemicals of the plants of the semiarid lands

S. Korkut, Duzce University, Düزce, Turkey
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particle boards, wood, wood adhesive, nanocellulose, cellulosic composites, adhesion, interface properties, bio-based adhesives

D. Lachenal, International Graduate School of Paper Print Communication and Biomaterials, St Martin d’Heres, France
pulping, lignin, bleaching, biorefinery from lignocellulosics

M.D. López Belchi, University of Concepcion Plant Production Department, Chillan, Chile
Natural Products from Plants, Analytical Techniques, Antioxidants, Enzymatic Assays, Encapsulation and Ingredients

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Biologically active compounds for pesticides, Postharvest treatment and storage, Product testing and development

M.J. Pascual-Villalobos, Instituto Murciano de Investigacion y Desarrollo Agrario y Alimentario, La Alberca, Spain
D. Pasquini, Federal University of Uberlandia, Uberlandia, Brazil
vegetal macromolecules, cellulosic fibers, composites, nanocellulose, nanocomposites, polymers from renewable sources

R. Pavela, Crop Research Institute Secondary Plant Metabolites in Crop Protection, Praha, Czechia
botanical insecticides, plant extracts, essential oils, insecticidal activity, repellency

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

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particle boards, wood, wood adhesive

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Lignocellulosic agricultural crop, Pretreatment, Cellulose, Hemicellulose, Lignin, Conversion, Biofuels, Chemicals, Biomaterials

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Abiotic stress, Castor bean, Crop Physiology, Metabolomics, Transcriptomics, Gene Expression, Seed germination and seedling development, Bioinformatics

R. Roseberg, Oregon State University Klamath Basin Research & Extension Center, Klamath Falls, Oregon, United States of America
soil science, agronomic aspects of crop production

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

D. Scordia, University of Catania, Catania, Italy

extractives, GC-MS

P.C. Stevenson, University of Greenwich Natural Resources Institute, Chatham, United Kingdom
Natural Products Chemistry, Bioactive compounds from plants, Botanical Insecticides, Chemical Ecology, Pollination Biology

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Biorefining, Biomaterials, Advanced Materials, Nanocomposites, Photocatalysis

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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

E.A. Turumtay, Recep Tayyip Erdogan 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

N. Tzortzakis, Cyprus University of Technology Department of Agricultural Sciences Biotechnology and Food Science, Lemesos, Cyprus
Plant physiology, Abiotic stress, Postharvest sanitation, Medicinal/Aromatic Plants, Soilless Culture/ Hydroponics

P. Velmurugan, Jeonbuk National University, Jeonju-si, South Korea

J.J. Villaverde, National Institute for Agricultural and Food Research and Technology Department of Variety and PhytoSanitary Products Evaluation, 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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Coprocesses, Fibre, Antioxidant, Antibacterial, Foods

G. Wang, The University of Arizona Maricopa Agricultural Center, Maricopa, Arizona, United States of America
crop production, nutrient management, crop rotation, and tillage management.

X. Wang, South China University of Technology, Guangzhou, China
Biomass-based Materials, Cellulose, Hemicellulose, Chitosan, Fiber, Hydrogel, Film, Aerogel, Paper

W. Weisany, Islamic Azad University Department of Agriculture and Food Science, Tehran, Iran
Medicinal and Aromatic Plants, Plant extracts, Essential oils, Nanoencapsulation, Biofertilizers, Mycorrhiza, PGPRs, Agronomy of non-food crops, Crop physiology, Abiotic stresses.

J. B. Xiao, University of Vigo, Vigo, Spain
Food chemistry, Polyphenol, Flavonoids, Functional food, Diabetes, Analytical chemistry

F. Xu, Beijing Forestry University School of Material Science and Technology Department of Forestry Chemistry, Beijing, China
Oilseed crops, Lignocellulosic crops, Biobased uses, Crop physiology, Abiotic stresses, Natural rubber

E.A. Turumtay, Recep Tayyip Erdogan 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

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Oilseed crops, Lignocellulosic crops, Biobased uses, Crop physiology, Abiotic stresses, Natural rubber
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INTRODUCTION

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Energy crops: fuel (bioethanol, biogas, syngas), biochar, chemicals, etc. Oils, fatty acids, biofuels (biodiesel, jet fuel, drop-in fuels), and chemicals derived from oilseed crops Biologically active compounds:

Insecticides, herbicides, fungicides, and pharmaceuticals (the species has to fit our definition of industrial crop; cultivated plants or plants with demonstrated potential to be cultivated with non-food purposes) Essential oils: inks, dyes, lubricants, perfumes, cosmetics, plastics, and other industrial applications Bio-based products must be 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 In the manuscript, all species must include the Latin name and Authority, the first time the species is mentioned in the abstract or text

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