**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.

**Research not in the scope of the journal:**

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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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Water use efficiency, Soil erosion, Leaf gas exchange, Models

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V. Cruz, Bridgestone Americas Center for Research and Innovation, Akron, Ohio, United States of America
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Crops for biomass and biofuels, agronomy, improvement and processing

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plant genetic resources, new industrial crop breeding., guayule

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M. Ghorbanpour, Arak University, , Iran
Phytonanotechnology (Nanotechnology in plant science), bioavailability of emerging contaminants, environmental stresses impacts on plant growth and metabolism, natural products and bioactive compounds of aromatic medicinal plants.

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

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biological aspects of crop production

**D.T. Ray**, The University of Arizona, Tucson, Arizona, United States of America
natural Insecticides, essential oils, plant chemistry

**C. Regnault-Roger**, University of Pau and Pays de l’Adour, Pau, France
Lignocellulosic agricultural crop, Pretreatment, Cellulose, Hemicellulose, Lignin, Conversion, Biofuels, Chemicals, Biomaterials

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extractives, GC-MS

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Natural Products Chemistry, Bioactive compounds from plants, Botanical Insecticides, Chemical Ecology, Pollination Biology

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

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Medicinal and Aromatic Plants, Plant extracts, Essential oils, Nanoencapsulation, Biofertilizers, Mycorrhiza, PGPRs, Agronomy of non-food crops, Crop physiology, Abiotic stresses.

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Natural products, Polyphenols, Diabetes, Functional food, Nutrition, Pharmacology

F. Xu, Beijing Forestry University School of Material Science and Technology, Department of Forestry Chemistry, Beijing, China
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INTRODUCTION

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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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