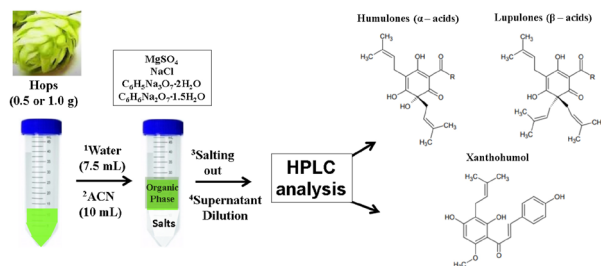


Artigos/Articles

- e-20230092 Avaliação quantitativa de ácidos amargos, xanthohumol e óleos essenciais presentes em flores de diferentes cultivares de *Humulus lupulus* L. produzidas na região Nordeste do Brasil
Samuel P. D. Marques, Maria T. S. Trevisan, Robert W. Owen, Ana M. A. Silva, Francisco M. G. Nascimento, Francisca S. S. Lima, Thales C. Lima, Edy S. de Brito, Hilton C. R. Magalhães, Francisco L. F. da Silva

<http://dx.doi.org/10.21577/0100-4042.20230092>

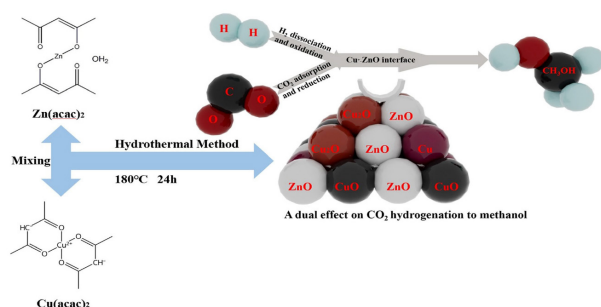
Hop flowers of different cultivars grown in the Northeast region of Brazil underwent QuEChERS extraction (1-4) using acetonitrile (ACN) with bitter acids (α and β) and the prenylflavonoid xanthohumol quantitated by liquid chromatography (HPLC).



- e-20230094 Dual promotion of Cu/ZnO catalysts modified by acetylacetone precursors for CO₂ hydrogenation to methanol
Junjie Xian, Yuntian Xu, Gaocheng Qu, Wei Na, Hua Wang and Wengui Gao

<http://dx.doi.org/10.21577/0100-4042.20230094>

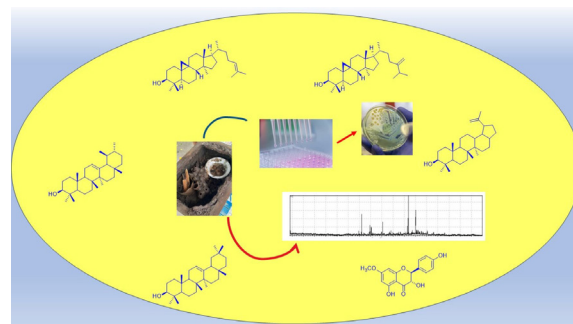
Cu/ZnO catalysts with complex valence copper were prepared by acetylacetone precursors, and the Cu⁺-ZnO active site formed directly without pre-reduction treatment, which has a dual promotion effect on H₂ and CO₂.



- e-20230096 Chemical constituents and antibacterial activity of three types of Amazonian *Melipona* spp. geopropolis
Darlan C. dos Santos, Jorge M. David, Oscar C. S. Neto, Brenda O. Lima, Regiane Yatsuda, Bruno O. Moreira, Lucas M. Marques and Richardson F. Frazão

<http://dx.doi.org/10.21577/0100-4042.20230096>

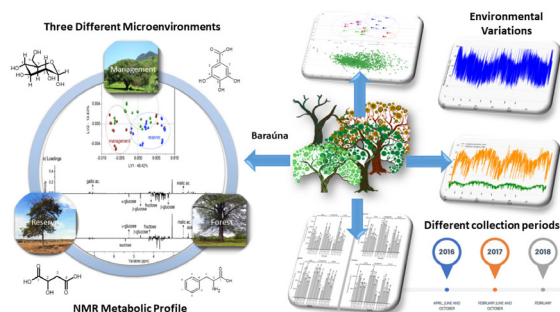
Fatty composition, triterpenes, and flavonoid are present in three types of Brazilian geopropolis from the Amazonian region.



- e-20230098 *Schinopsis brasiliensis* bark metabolomic profiling based on NMR: evaluation of metabolic variations of different microenvironment and seasonal periods
Licia dos R. Luz, Elenilson G. Alves Filho, M^a Madalena da S. Soares, Diogo D. Porto, Helena Becker and Guilherme J. Zocolo

<http://dx.doi.org/10.21577/0100-4042.20230098>

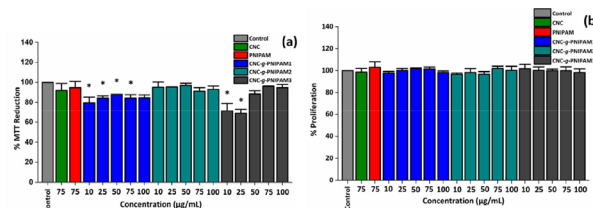
Correlation between metabolomic profiles and environmental factors: evaluating the impact on metabolite production in *Schinopsis brasiliensis* bark samples.



e-20230100 Thermoresponsive cellulose nanocrystals protecting macrophage cells from oxidative stress

José A. Pinheiro, Nívia do N. Marques, Maylla M. C. L. Silva, Hugo A. O. Rocha and Rosângela de C. Balaban

<http://dx.doi.org/10.21577/0100-4042.20230100>

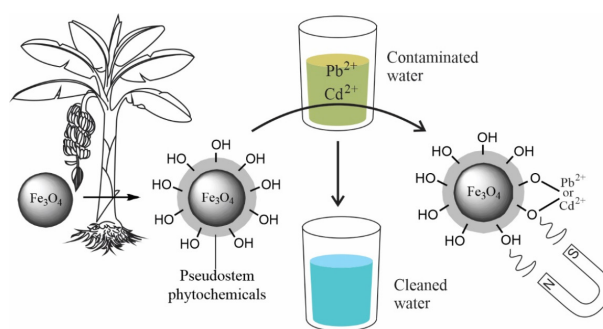


(a) Reduction of MTT to formazan (%) and (b) cell proliferation assay by cells exposed to: homopolymer PNIPAM, unmodified CNC and modified CNC-g-PNIPAM.

e-20230102 Modified magnetite nanoparticles with the juice of plantain pseudostem: an option for water decontamination

Camilo E. G. Henao, Guillermo S. Grosso, Hoover A. V. Sánchez and Anderson G. Franco

<http://dx.doi.org/10.21577/0100-4042.20230102>



Phytochemicals from plantain pseudostem removing Cd(II) and Pb(II) from water. The phytochemicals can be immobilized on magnetite nanoparticles. These nanoparticles and contaminant metals are easily separated by an external magnet.

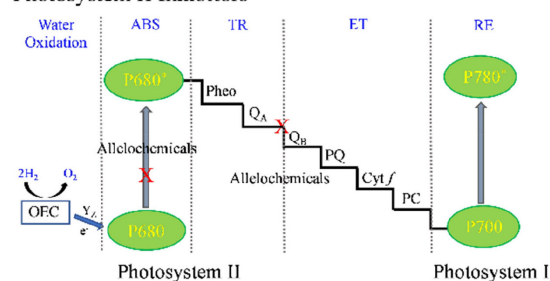
Revisão/Review

e-20230097 Inibidores do fotossistema II: uma perspectiva aleloquímica

Anthony da Silva, Jéssica M. de Souza, Geilly Mara S. de Pádua, Arielly C. R. Santos, Leonardo G. de Vasconcelos, Evandro L. Dall'Óglio, Barbara S. Bellele, Thiago A. M. Veiga, Lucas C. C. Vieira e Olívia M. Sampaio

<http://dx.doi.org/10.21577/0100-4042.20230097>

Photosystem II Inhibitors

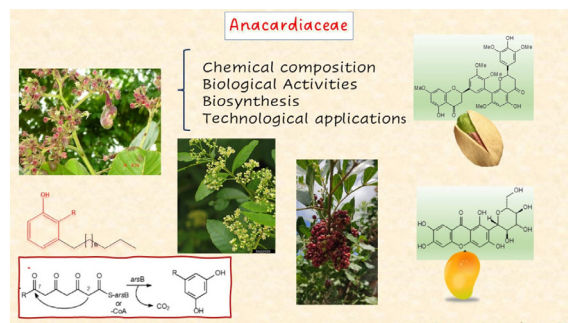


The use of chlorophyll *a* fluorescence assay to evaluate the allelochemical activity of natural products as electron flow blockage of photosystem II is discussed in this review.

e-20230101 Chemical composition, biological activities and uses of Anacardiaceae species: an updated review

André B. Cunha and Jorge M. David

<http://dx.doi.org/10.21577/0100-4042.20230101>



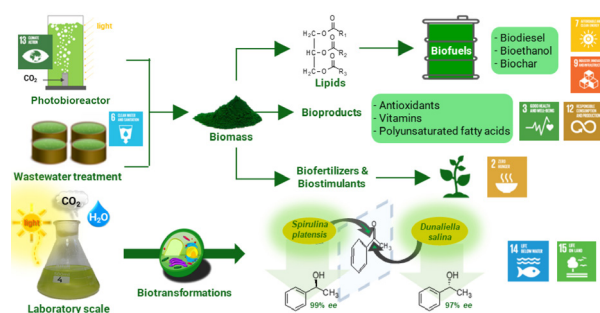
The present review describes a critical updated compilation of studies regarding the chemical composition, biological activities, technological studies, and biosynthesis of phenolic lipids of Anacardiaceae.

- e-20230107 Microalgas: uma estratégia sustentável na transformação e obtenção de compostos orgânicos

Mauricio M. Victor, Fernando L. B. Moutinho e Valéria B. Riatto

<http://dx.doi.org/10.21577/0100-4042.20230107>

Microalgae are photosynthetic microorganisms with applications in biotechnology beside other uses, indicating their potential for a green and sustainable future.



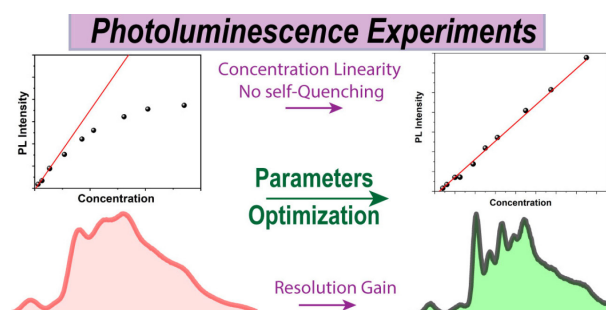
Nota Técnica/Technical Notes

- e-20230095 Espectroscopia de fluorescência: dos fundamentos à influência dos parâmetros instrumentais para análises de corantes orgânicos e nanopartículas inorgânicas

Rafael S. Mourão, Brenner R. Carvalho Vale, André F. Vale Fonseca, Thaís A. S. Carvalho e Marco A. Schiavon

<http://dx.doi.org/10.21577/0100-4042.20230095>

The full understanding of spectrofluorometer parameters such as the excitation wavelength, excitation and emission slits, step, integration time, detection geometry as well as concentration of the samples help the acquisition of emission spectra free of artifacts.

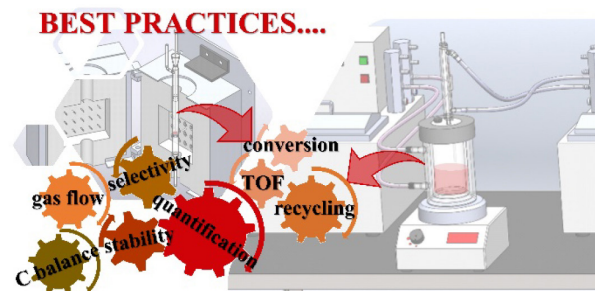


- e-20230099 Boas práticas e equívocos nas medidas de atividade catalítica de materiais em termocatálise

Leandro Martins, Laura L. Silva e Luiz G. Possato

<http://dx.doi.org/10.21577/0100-4042.20230099>

This technical note summarizes the most common pitfalls in thermo-catalysis and how they might limit obtaining reliable catalytic experiments and data evaluation.



Educação/Education

- e-20230103 Modelos e eletronegatividade: uma proposta de sequência didática para o Ensino de Química

Joana S. O. Galavotti, Luís F. B. Bim e Marco A. Cebim

<http://dx.doi.org/10.21577/0100-4042.20230103>

A didactic sequence about electronegativity was elaborated for the area of Chemistry in higher education. This sequence has five moments that approach the main for this property.

