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**Opinion**      **Published Date:-2023-02-17 17:26:28**

[Possible bases of the resistance of Coconut palm to the phytoplasma that causes lethal yellowing disease](#)

Phytoplasmas belong to the parasitic group of mollicutes, which represent a phylogenetically coherent group of pathogens that colonize a wide spectrum of hosts and insects [1].

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**Mini Review**      **Published Date:-2023-02-10 17:23:14**

[Phytochemical and pharmacological properties of Jatropha dioica](#)

*Jatropha dioica* Sesse ex Cerv is a species native to Mexico and Texas, commonly known as “sangre de drago”, its name is due to its colorless juice turning dark at exposure to the wind. This mini-review aims to collect information about the phytochemical and pharmacological properties of *Jatropha dioica*. The phytochemicals identified are diterpenes, (citrilalitrone, jatrophone and riolozatrione),  $\beta$ -sitosterol, oxalic acid and ellagic acid. The stems, whole plant, or the root of *J. dioica* in traditional medicine are used to avoid hair loss, as an antibacterial, and antiviral, to strengthen teeth, and to heal some injuries among others uses. Among the biological activities attributed to *Jatropha dioica* are found in antiviral activity, antifungal, antimicrobial, chemopreventive, anti-hyperglycemic and cytotoxic. However, the little information about the chemical composition of this species and the scarce scientific studies validating its pharmacological properties make *J. dioica* an interesting species to study.

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**Short Communication**      **Published Date:-2023-01-12 10:54:26**

[The needs and challenges for water footprinting in arid regions](#)

Climate change has left its traces on the planet in the last 3 decades. Most of the influenced areas were occupied in the Middle East which was degraded to desertification phenomena today. The per capita share of renewable water has been reduced to less than the poverty line of 1,000 m<sup>3</sup>/capita and in some Arab countries, to less than the extreme poverty line of 500 m<sup>3</sup>/capita).

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**Research Article**      **Published Date:-2023-01-06 10:47:56**

[Control of rice bakanae disease by seed dressing with mixed solution of fludioxonil, metalaxyl-M and azoxystrobin](#)

Rice bakanae disease is a typical seed-borne disease caused by *Fusarium fujikuroi* that occurs in seedling beds and in fields. Fungicide seed treatment is an effective solution to this disease. In this study, we used a triple-fungicide suspension identified as 11% FMA, which is composed of 1.1% fludioxonil, 3.3% metalaxyl-M and 6.6% azoxystrobin to coat rice seeds for the prevention of bakanae disease. 11% FMA is water-logging resistant for rice seed treatment. Results showed that the mycelial growth of *F. fujikuroi* was significantly inhibited by 11% FMA in the laboratory test. Seed dressing with FMA at the rate of 1, 2, and 4 g per kg of seeds promoted seed germination and growth of seedling roots. Treatment with 11% FMA under all dose rates prevented rice bakanae disease of seedlings by more than 90%, especially by more than 95% at 4, 6 and 8 g per kg of seeds. During the subsequent maturation period, rice bakanae control efficiency reaches above 95% as well at 6 or 8 g per kg of seeds, slightly larger than about 92% at 1 or 2 g per kg of seeds. Above all, the rice yield notably improved by 11% with 1 g/kg, by around 8% with 2, 4, or 8 g/kg and by 5% with 6 g/kg treatment.

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