

## **COLEGIO DE POSTGRADUADOS**

INSTITUCIÓN DE ENSEÑANZA E INVESTIGACIÓN EN CIENCIAS AGRÍCOLAS CAMPECHE-CORDOBA-MONTECILLO-PUEBLA-SAN LUIS POTOSI-TABASCO-VERACRUZ



"2014, Año de Octavio Paz"

April 13, 2017

Dr. Fernando Álvarez Noguera *Instituto de Biología, UNAM* Editor-in-Chief Revista Mexicana de Biodiversidad

Greetings from *Colegio de Postgraduados*, Texcoco, Mexico. Attached I am sending you a manuscript entitled *"Ectomycorrhizal inoculation increases plant growth and nutrient contents of Pinus ayacahuite Ehrenberg"* to be considered for possible publication in the prestigious journal *Revista Mexicana de Biodiversidad* of which you are Editor-in-Chief.

The manuscript is related with the biotechnological use of inoculating a very important species of Christmas tree with beneficial symbiotic fungi. In general, the use of beneficial microorganisms instead of using chemical fertilizers in agriculture and forestry has gained wider acceptance due to the fact that is cheaper and environmentally friendly. The Christmas tree production is an important industrial activity which is worth billions of US dollars world-wide. Particularly, in developing countries, like Mexico, where there are huge deforestation rates due to social problems, this activity is of paramount economic and environmental importance in the generation of jobs and protection of the environment. To survive Christmas trees need the establishment of a symbiotic relationship with beneficial mushrooms, which help the trees to transfer their nutrients, called ectomycorrhiza. However, the studies related with the use of biotechnological techniques using these beneficial mushrooms in Christmas tree production have received little attention in our country. The manuscript presents novel research, carried out during four years of research, using beneficial fungi which conspicuously increased the plant growth and nutrient contents. Particularly, the research present novel information related with the transfer of different nutrients like N, P, Mg and particularly interestingly the micronutrient Fe. As far as we know, this is first research that conclusively demonstrates that the ectomycorrhizal fungi are able to transfer Fe to any gymnosperm tree. The article also demonstrates that the inoculation with the evaluated edible ectomycorrhizal mushrooms has a great biotechnological potential in the production of Christmas trees. The manuscript is the result of four years of research.



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Yours truly,

Prof. Jesús Pérez-Moreno, PhD Microbiología, Edafología Colegio de Postgraduados Texcoco, Mexico

PS. In case it is of any use, due to the Journal section, the suggested editor might be: Dr. Roberto Garibay Orijel Recognized expert in the ectomycorrhizal symbiosis Instituto de Biología, UNAM

and the possible reviewers could be any of the following worldwide recognized experts in the ectomycorrhizal symbiosis:

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