Bioquirama SAS

PROCESS
COMPATIBILITY TEST

OBJETIVE

Determine the level of compatibility of chemical fertilizers whose main component is copper phosphide (Cu3PO3) mixed with biocontrol organisms such as fungi and bacterium.

MATERIALS AND METHODS

To carry out these tests was used:

NAME	DESCRIPTION
Nutritions media	PDA, Nutrient Agar
Box Petri	In glass
Instrumental for sowing	Forceps, Bacteriological Asas, Drigalski glass spatulas, Beaker Micropipette tips.
Pure cultures of microorganisms	Bacterium and fungi
Laminar flow cabinet, incubator	Sowing and incubation
sterile water	To mix the product.
Commercial fertilizer	Copper sulfate active ingredient

To start the process the respective culture medium was prepared; in the case of testing for fungi and acidified PDA it was used for the assessment Bacteria Nutrient Agar was prepared.

The fungi that were evaluated were:

- *Beauveria bassiana*
- *Trichoderma harzianum*
- *Purpureocillium lilacinum*.

Bacteria were evaluated:

- *Amyloliquefasciens sp*
- *Lysinibacillus sp*

Bioquirama SAS

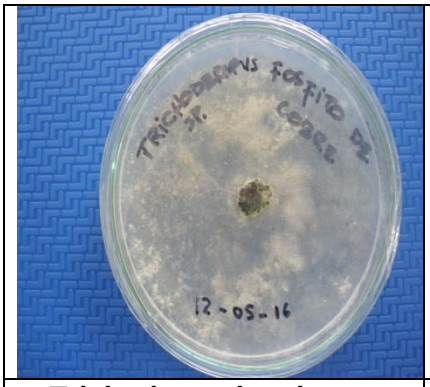
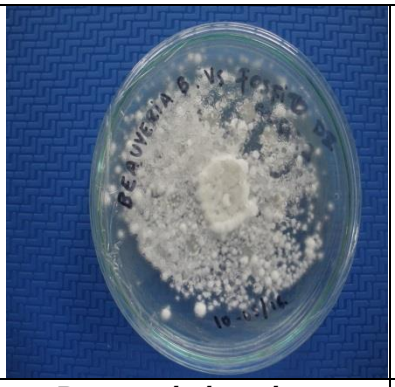
PROCESS
COMPATIBILITY TEST

Initially mixing the commercial product using the recommended dose (1.5 mL / L) in sterile water was made, then a volume of 100 (0.1 ml) of the mixture is taken and deposited on the medium surface spreading it with a glass spatula Drigalski. Subsequently seeding the microorganism was performed in the center of the petri dish containing the culture medium, and were tagged ends of the boxes with plastic wrap (Vinilpel) sealed.

For the process of incubation of the fungus, these were maintained at a temperature of 27°C for 72 hours. For Bacterium were incubated at 37°C for 24 hours in the area of bacteriology.

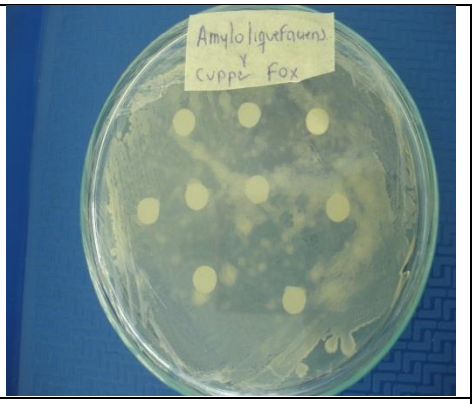
RESULTADOS Y CONCLUSIONES

After incubation process normal growth on the surface of the culture medium, both fungi and bacteria was observed evaluated (see photographic record). Strains used have been previously identified and are within the rotation for producing biological inputs.

		
Trichoderma harzianum	***Beauveria bassiana***	***Purpureocillium lilacinum***

Bioquirama SAS

PROCESS
COMPATIBILITY TEST

	
Lysinibacillus sp	***Amyloliquefasciens sp***

According to the above it can be concluded that products containing the active ingredient phosphite copper (Cu3PO3) are highly compatible with biological inputs whose formulation containing fungi and bacteria of entomopathogenic type and antagonists, and therefore can be applied at the same time and even mixed prior to application.

Procedures performed in laboratories Bioquirama with own methods.

Date: May 2016

Rodrigo Patiño Guzmán - Analist