

Vidéo

A germination bioassay was developed to screen for potential phytotoxicity of soil amendment products from organic waste recycling. In phase 1, nine soil amendment products were applied as mulches on 3- to 5-week-old tomato seedlings. Using lettuce as the test species, a laboratory germination test was developed in phase 2 with aqueous extracts from a non-phytotoxic and a phytotoxic product identified in phase 1. Diluted extracts were applied to lettuce seeds sown on filter paper in petri-dishes and germination was monitored for 5 days, confirming the results from phase 1. In phase 3, the bioassay developed in phase 2 was used to test three previously untested local products and one imported product. Results obtained in phase 3 were confirmed using the mulch test. Hence, the germination bioassay can be a useful tool for quality control in the production of soil amendment products from organic waste recycling.

[LOPEZ, FRANCIS \(19... : DOCTEUR EN SCIENCES BIOLOGIQUES ET MÉDICALES\)](#) Le Gosier 2016

Résumé

A germination bioassay was developed to screen for potential phytotoxicity of soil amendment products from organic waste recycling. In phase 1 of the study, nine soil amendment products were applied as mulches on 3- to 5-week-old tomato seedlings planted in 4L pots. Using lettuce as the test species, a laboratory germination test was developed in phase 2 with aqueous extracts from a non-phytotoxic and a phytotoxic product identified in phase 1. Diluted extracts (0, 25, 50, 75 and 100%) were applied to lettuce seeds sown on filter paper in petri-dishes and germination was monitored for 5 days, confirming the results from phase 1. In phase 3, the bioassay developed in phase 2 was used to test three previously untested local products and one imported product. Results obtained in phase 3 were confirmed using the mulch test. Hence, the germination bioassay can be a useful tool for quality control in the production of soil amendment products from organic waste recycling.

Informations

Extrait:	52E CONGRÈS ANNUEL DE LA SOCIÉTÉ CARIBÉENNE DES PLANTES ALIMENTAIRES / 52ND ANNUAL MEETING OF THE CARIBBEAN FOOD CROPS SOCIETY (CFCS), DU 10 AU 16 JUILLET 2016
Edition:	University of the West Indies (Cave Hill, Barbados), Le Gosier, 12 juillet 2016
Langues:	Anglais
Provenances:	Université des Antilles
Type de contenu - document:	Vidéo - Colloque & conférence
Base:	Bibliothèque numérique Manioc
Audience:	Public universitaire
Format:	video/mp4

Mots clés

[CULTURES MARAÎCHÈRES](#)

[ENVIRONNEMENT](#)

[AGRONOMIE, AGRICULTURE](#)

Conditions d'utilisation

CC-BY-NC-ND - Attribution - Pas d'utilisation commerciale - Pas de modification

Citer ce document

Lopez Francis, "A germination bioassay was developed to screen for potential phytotoxicity of soil amendment products from organic waste recycling. In phase 1, nine soil amendment products were applied as mulches on 3- to 5-week-old tomato seedlings. Using lettuce as the test species, a laboratory germination test was developed in phase 2 with aqueous extracts from a non-phytotoxic and a phytotoxic product identified in phase 1. Diluted extracts were applied to lettuce seeds sown on filter paper in petri-dishes and germination was monitored for 5 days, confirming the results from phase 1. In phase 3, the bioassay developed in phase 2 was used to test three previously untested local products and one imported product. Results obtained in phase 3 were confirmed using the mulch test. Hence, the germination bioassay can be a useful tool for quality control in the production of soil amendment products from organic waste recycling.", 2016. Extrait de: *52e congrès annuel de la Société caribéenne des plantes alimentaires / 52nd annual meeting of the Caribbean food crops society (CFCS), du 10 au 16 juillet 2016*, Colloque & conférence, University of the West Indies (Cave Hill, Barbados), Le Gosier, 12 juillet 2016. Bibliothèque numérique Manioc consulté le 24 novembre 2024. Lien: [HTTP://WWW.MANIOC.ORG/FIHIERS/V16302](http://www.manioc.org/fichiers/v16302).

© Manioc 2022 - Tous droits réservés