

## عنوان مقاله:

Application of different doses of compost as a substitution of the commercial substrate in nursery for pepper and tomato seedlings

## محل انتشار:

مجله بین المللی بازیافت مواد آلی در کشاورزی، دوره 11، شماره 4 (سال: 1401)

تعداد صفحات اصل مقاله: 16

## نویسندگان:

Maria Fiasconaro - *Instituto de Desarrollo Tecnológico para la Industria Química - (CONICET- UNL), Universidad Católica de Santa Fe, Santa Fe, Argentina*

Mariana Abrile - *Instituto de Desarrollo Tecnológico para la Industria Química - (CONICET- UNL), Universidad Nacional del Litoral, Santa Fe, Argentina*

Lucia Hintermeister - *Universidad Nacional del Litoral, Bv. Pellegrini ۲۷۵۰ - (۳۰۰۰) Santa Fe, Argentina*

Maria del Carmen Antolin - *Grupo de Fisiología del Estrés en Plantas (Dpto. de Biología Ambiental), Unidad Asociada al CSIC (EEAD, Zaragoza, ICVV, Logroño), Facultad de Ciencias, Universidad de Navarra, c/ Irunlarrea 1, ۳۱۰۰۸, Pamplona, Spain*

Maria Eugenia Lovato - *Instituto de Desarrollo Tecnológico para la Industria Química - (CONICET- UNL), Universidad Nacional del Litoral, Santa Fe, Argentina*

## خلاصه مقاله:

**Purpose** The decreasing number of peatlands has driven the search for new cultivation substrates. The aim of this study was to evaluate the use of different composts as growing media in the production of vegetable seedlings (pepper and tomato). **Method** Composts were produced from: discarded carrots (ZC), fats (FC), and biosolids (BC) from the dairy industry. They were used as peat substitutes in different doses depending on the germinating species: control (CS-commercial substrate) and three growing media prepared with perlite: ۲۵, ۳۵, and ۴۵% of ZC, FC, and BC for pepper seedlings and ۴۰, ۵۵ and ۷۰% of ZC, FC, and BC for tomato seedlings. When the plants were ready for transplantation they were harvested and the data were collected to assess the development of the seedlings in the different growth media. **Results** The obtained results suggest the possibility of total substitution of the CS by ZC, FC, and BC to produce pepper and tomato plants in commercial nurseries. The plants cultivated with composts presented higher concentrations of total dry matter compared to the controls. Photosynthetic pigments were affected by the presence of FC and BC, whereas TSP concentration was favored by BC. **Conclusion** Ours results suggest that it is feasible to perform a total substitution of commercial substrates with composts of different origins and compositions .for the production of pepper and tomato plants in commercial nurseries

## کلمات کلیدی:

compost, Growing media, Tomato, Pepper, Nursery

## لینک ثابت مقاله در پایگاه سیویلیکا:

