

Table of Contents

In Press

Article Archive

[HORTSCI \(45\) 2018](#)[HORTSCI \(44\) 2017](#)[HORTSCI \(43\) 2016](#)[HORTSCI \(42\) 2015](#)[HORTSCI \(41\) 2014](#)[HORTSCI \(40\) 2013](#)[HORTSCI \(39\) 2012](#)[HORTSCI \(38\) 2011](#)[HORTSCI \(37\) 2010](#)[HORTSCI \(36\) 2009](#)[HORTSCI \(35\) 2008](#)[HORTSCI \(34\) 2007](#)[HORTSCI \(33\) 2006](#)[HORTSCI \(32\) 2005](#)[HORTSCI \(31\) 2004](#)[HORTSCI \(30\) 2003](#)[Issue No. 1 \(1-42\)](#)[Issue No. 2 \(43-79\)](#)[Issue No. 3 \(81-122\)](#)[Issue No. 4 \(123-158\)](#)[HORTSCI \(29\) 2002](#)

Editorial Board

Ethical Standards

Reviewers 2017

For Authors

Author Declaration

Instruction for Authors

Submission Templates

Guide for Authors

Copyright Statement

Fees

Submission/Login

For Reviewers

Guide for Reviewers

Reviewers Login

Subscription

Cultivation of *Brassica pekinensis* under different forms of nitrogen nutrition

L. Ducsay, L. Varga

<https://doi.org/10.17221/3871-HORTSCI>

Citation: Ducsay L., Varga L. (2003): Cultivation of *Brassica pekinensis* under different forms of nitrogen nutrition. Hort. Sci. (Prague), 30: 112-115.

[download PDF](#)

A pot trial was aimed to investigate the effect of different forms of nitrogen fertilizer on the aboveground phytomass yield, vitamin C content and uptake of some macroelements by *Brassica pekinensis*. The trial was conducted in 2000 and 2001 in pots containing 10 kg of loamy brown soil. Optimized NPK nutrition with the rate of 90.9 kg/ha N increased phytomass yields of Chinese cabbage in all treatments compared to the unfertilized control. The most marked increase (by 55.6%) of yield was obtained when N was applied in the form of $(\text{NH}_4)_2\text{SO}_4$. The yields in the other treatments declined as follows: $\text{NH}_4\text{NO}_3 > \text{Mg}(\text{NO}_3)_2 > \text{KNO}_3 > \text{DAM-390}$. Positive effects of full NPK nutrition on vitamin C content were determined. Depending on the forms of N fertilizer, the content of vitamin C in fresh mass of cabbage decreased in the following order: DAM-390 (629.0 mg/kg of fresh mass) $> \text{Mg}(\text{NO}_3)_2 > \text{KNO}_3 > \text{NH}_4\text{NO}_3 > (\text{NH}_4)_2\text{SO}_4$. Optimization of NPK rates contributed to the increase in N, P, K, Ca, Mg and S uptake by the yield of final product in comparison with unfertilized control. The highest uptake of nutrients was determined in the treatment with N applied in the form of $(\text{NH}_4)_2\text{SO}_4$.

Keywords:

Brassica pekinensis; NPK nutrition; vitamin C; macroelements

[download PDF](#)
Impact Factor (WoS)2017: **0.5**5-Year Impact Factor: **0.8****SJR (SCImago Journal Ra****SCOPUS):**2017: **0.318 – Q2** (Horticul
 Share
Similarity Check

All the submitted manus checked by the [CrossRef Check](#).

New Issue Alert

Join the journal on [Facel](#)

Referred to in

[Agrindex of Agris/FAO da](#)

[BIOSIS Previews](#)

[CAB Abstracts](#)

[CNKI](#)

[Czech Agricultural and F](#)

[Bibliography](#)

[DOAJ \(Directory of Open](#)

[Journals\)](#)

[EBSCO – Academic Searc](#)

[Ultimate](#)

[EMBiology](#)

[Google Scholar](#)

[Horticulturae Abstracts](#)

[ISI Web of KnowledgeSM](#)

[J-GATE](#)

[Plant Breeding Abstracts](#)

[Science Citation Index Ex](#)

[SCOPUS](#)

[Web of Science®](#)

Licence terms

All content is made freely for non-commercial purp users are allowed to copy redistribute the material, transform, and build upo material as long as they c source.

Open Access Policy

This journal provides inm open access to its conter principle that making res freely available to the pu supports a greater globa exchange of knowledge.

Contact

Ing. Eva Karská

Executive Editor

phone: + 420 227 010 606

e-mail: hortscai@cazv.cz

Address

Horticultural Science

Czech Academy of Agricu

Sciences

Slezská 7, 120 00 Praha 2,

Republic