

International Journal of Forestry and Crop Improvement

Volume 4 | Issue 1 | June, 2013 | 44-46

Research Article

Role of *Bacillus circulans* - A bacterial fertilizer on yield quality and economics of aniseed (*Pimpinella anisum*)

R.A. SINGH, M.K. SINGH, S.B. PAL, D.P. SINGH, RAJIV AND DHARMENDRA YADAV

ABSTRACT: An experiment was laid out on degraded sandy loam soil during winter season of 2004-2005 and 2005-06 at Regional Research Station, Mainpuri, C.S. Azad University of Agriculture and Technology, Kanpur. The main objective was to increase the quantitative and qualitative production of aniseed on riverine soils of Uttar Pradesh through integration of bacterial fertilizer with recommended dose of NPK. The five level of *Bacillus circulans* containing bio fertilizer *i.e.*, 0, 10, 15, 20 and 25 kg/ha were tested in association of 80 kg N+40 kg P₂ O₅ + 40 kg K₂O/ha. Application of *Bacillus circulans* containing bio fertilizer @ 20kg/ha or 2.00 lakh carror bacteria per hectare registered higher seed yield of aniseed by 15.10 q/ha over control (11.40 q/ha) and lower installments of *Bacillus circulans* containing bio fertilizer during both experimental seasons. The installment of *Bacillus circulans* containing bio fertilizer beyond 20 kg/ha confined to the further progress in aniseed production. The produce obtained from the *Bacillus circulans* applied plots showed marketable bright green colour over the produce of control plots. The chewing taste of aniseed kernels obtained from bacterial fertilizers treated plots was better than the control plots product.

KEY WORDS: Bacillus circulans, Riverine soils, Natural inoculation, Chewing quality, Asthma

How to cite this Article: Singh, R.A., Singh, M.K., Pal, S.B., Singh, D.P., Rajiv and Yadav, Dharmendra (2013). Role of *Bacillus circulans* - A bacterial fertilizer on yield quality and economics of aniseed (*Pimpinella anisum*), *Internat. J. Forestry & Crop Improv.*, 4 (1): 44-46.

Article Chronical: Received: 21.11.2012; Revised: 22.05.2013; Accepted: 28.05.2013

MEMBERS OF RESEARCH FORUM

Address of the Correspondence:

R.A. SINGH, Directorate of Extension, C.S. Azad University of Agriculture and Technology, KANPUR (U.P.) INDIA Email: rasingh_csau@yahoo.co.in

Address of the Coopted Authors :

M.K. SINGH, S.B. PÂL, D.P. SINGH, RAJIV AND DHARMENDRA YADAV, Directorate of Extension, C.S. Azad University of Agriculture and Technology, KANPUR (U.P.) INDIA