

[Available Issues](#) | [Japanese](#)>> [Publisher Site](#)Author: [ADVANCED](#)

Volume Page

Keyword: [TOP](#) > [Available Issues](#) > [Table of Contents](#) > [Abstract](#)

ONLINE ISSN : 1349-1008

PRINT ISSN : 1343-943X

Plant Production Science

Vol. 11 (2008) , No. 4 507-513

[\[PDF \(667K\)\]](#) [\[References\]](#)**Influence of Sowing Time and Nitrogen Topdressing at the Flowering Stage on the Yield and Pod Character of Green Soybean (*Glycine max* (L.) Merrill)**[Hideaki Nishioka](#)¹⁾ and [Toshikatsu Okumura](#)¹⁾

1) Faculty of Agriculture, Kinki University

(Received: September 19, 2007)

Abstract: Basal dressing is generally considered important in the conventional cultivation of green soybean (edamame). In this experiment, we investigated the influence of the sowing time and nitrogen topdressing at the flowering stage on its yield and pod character. Seeds were sown on April 10 (early) and April 20 (late); the total amount of nitrogenous fertilizer applied was maintained constant, and the ratio of nitrogen applied as basal dressing to that applied as topdressing was changed : 10 : 0, 7 : 3, 3 : 7, and 0 : 10. The plant top growth during the early growth stages and its dry weight during the flowering stage increased with the increase in the amount of nitrogen applied as basal dressing, but the length of the main stem, number of branches, and total number of nodes at the time of harvesting did not. The yield, number of pods, and proportion of high-quality 3-grained pods increased with the amount of nitrogen topdressing. The number of pods set and the green soybean yield tended to decrease with the delay in the sowing time. However, in both early and late sowing, the yield tended to be higher when large quantities of nitrogen topdressing were applied. These results suggest that nitrogen topdressing after the flowering stage is effective in improving the yield of green soybean.

Keywords: [Green soybean](#), [Nitrogen topdressing](#), [Pod character](#), [Pod yield](#)[\[PDF \(667K\)\]](#) [\[References\]](#)Download Meta of Article [\[Help\]](#)[RIS](#)

To cite this article:

Hideaki Nishioka and Toshikatsu Okumura: "Influence of Sowing Time and Nitrogen Topdressing at the Flowering Stage on the Yield and Pod Character of Green Soybean (*Glycine max* (L.) Merrill)". *Plant Production Science*, Vol. **11**, pp.507-513 (2008) .

doi:10.1626/pps.11.507

JOI JST.JSTAGE/pps/11.507

Copyright (c) 2008 by The Crop Science Society of Japan



[Japan Science and Technology Information Aggregator, Electronic](#)

