



Plant Production Science

The Crop Science Society of Japan

[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. 8 (2005) , No. 2 186-191



[\[PDF \(564K\)\]](#) [\[References\]](#)

Anatomical Characteristics of the Formation of Crown Root Primordia in Unelongated Stems of Wheat

[Youji Nitta](#)¹⁾, [Yuta Suzuki](#)¹⁾ and [Toshiaki Matsuda](#)¹⁾

1) College of Agric., Ibaraki Univ.

(Received: July 27, 2004)

Abstract: Anatomical observations were conducted to clarify some characteristics of the crown root primordia (CRP) formation in wheat stems. Unelongated portions of main stems were sampled from the plant at 3.2 and 7.2 plant age in leaf number, which were adopted as indexes because of the similarity to rice plants. Then, serial cross sections were made to investigate the position of CRP in the unelongated stem taking into consideration the running of vascular bundles in the stem. CRP were formed just outside tissues of the peripheral cylinder of longitudinal vascular bundles. The positions of CRP were not successive along the stem axis. They showed no definite relation to the running of vascular bundles. Diameters of CRP at the upper portion of the stems were larger than those at the lower portion. The positions of CRP along the stem axis were not distinguishable into nodal and internodal position. CRP and emerged CRs were not classified by the well-known 'nodal root' or 'shoot unit root', or the 'unit', which have been applied recently to rice plants. Further studies are necessary to clarify the factors controlling CRP formation anatomically and quantitatively.

Keywords: [Crown root primordia](#), [Peripheral cylinder of longitudinal vascular bundles](#), [Triticum aestivum L.](#), [Unelongated stem](#), [Vascular bundle](#), [Wheat](#)



[\[PDF \(564K\)\]](#) [\[References\]](#)

To cite this article:

Youji Nitta, Yuta Suzuki and Toshiaki Matsuda: “Anatomical Characteristics of the Formation of Crown Root Primordia in Unelongated Stems of Wheat”. *Plant Production Science*, Vol. **8**, pp.186-191 (2005) .

doi:10.1626/pps.8.186

JOI JST.JSTAGE/pps/8.186

Copyright (c) 2005 by The Crop Science Society of Japan



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

