P128

Effects of seeding methods and harvesting time on yield of perilla seeds

Weon-Tai Jeon[1], Kangsu Kwak[2], Jin-Woo Bae[2], Won-Young Han[2], Myoung-Hee Lee[2], Jong-Soo Ryu[2], Hang-Won Kang[2], Gun-Ho Jeong[1], KangBo Shim[1], Sunggi Heu[1]

[1]*National Institute of Crop Sciences, Department of Central Area Crop science, Suwon, Republic of Korea, 16429*
[2]*National Institute of Crop Sciences, Department of Southern Area Crop science, Milyang, Republic of Korea, 50424*

Abstract

In order to reduce the loss of perilla seeds at harvesting stage, different seeding methods and harvesting time had been applied to upland soil in NICS (National Institute of Crop Science), RDA, Milyang, Korea. The seeding methods were divided into hill and drill seeding, and harvesting time were 40%, 60%, 80%, and 100% color-changing of top cluster perilla (cv Deulsaem) seeds. Higher plant height and lowest flower cluster, thinner culm thickness was observed in drill seeding treated plot than hill seeding treated plot. However, field lodging occurred lower at drill seeding treatment (lodging degree 3) than hill seeding plot (lodging degree 5). Harvesting time affected the loss of perilla seeds and the loss rate of perilla seeds were investigated at different color-changing of top flower cluster. When seeds were harvested at 40%, 60%, 80%, and 100% color-changing of top cluster perilla seeds, the loss rate of hill and drill seeding showed no significant differences however the loss rated of 40, 60, 80, and 100 % color-changing of top flower cluster were 1.9% to 3.0%, 3.8% to 3.9%, 8.0% to 10.2%, and 16.1% to 22.7%, respectively. The harvesting time had no significant effects on the yield of perilla seeds. These results suggest that optimum harvesting time of perilla could be recommend at the 60% color-changing of top cluster to reduce the loss of perilla seeds.

Keywords : Perilla, Seeding method, Harvesting time, Seeds loss

Corresponding author*
Jeon Weon-Tai
Address : 126 Suin-ro, Gwonseon-gu, Suwon, ROK
Tel / Fax : +82-31-695-4091 / +82-31-695-4095
E-mail : jeon0tai@korea.kr