

Title Control of leaf development and bulbing in onions *Allium cepa* L. by modifying light intensity
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Citation Abstracts, 10th International Controlled & Modified Atmosphere Research Conference, 4-7 April 2009, Antalya, Turkey. 80 pages.
Keyword Light intensity; onion; leaf

Abstract

Light levels to individual plants were reduced either by using artificial materials for shading or altering leaf density. The effect of reduction of incoming solar radiation was similar in both two methods. Individual plants were generally larger under higher light levels. Total leaf area, leaf dry weight, bulb size and bulb dry weight increased as light intensity increased. Shading plants naturally or artificially tended to increase both specific leaf area and leaf area index due to thinner leaves with less dry matter accumulated per unit leaf area. Plant efficiency was changed by altering plant density and shading level. Efficiency was increased by either increasing plant density or reducing light intensity.