Using Natural Fiber Mulches for Weed Suppression in Organic Production of Two Herbs, Nepeta cataria L. and Hypericum perforatum L. (C03-duppong162401-Poster)

Authors:

- L.M.Duppong* *Iowa State University*
- K.Delate Iowa State University
- M.Liebman Iowa State University
- R.Horton *Iowa State University*

Abstract:

An excellent opportunity exists for organic farmers in the Midwest to plant high value niche crops, such as medicinal herbs. An experiment was conducted in 2001 and 2002 in Ames, Iowa, to test the weed suppression of several organic mulches in two herbs, catnip (Nepeta cataria L.) and St. John's Wort (Hypericum perforatum L.). Treatments included organic oat straw, flax mat, unwoven wool mat, a positive (hand weeded) control, and a negative control that was not weeded. In the first season, weed densities were equivalent in the hand weeded control, flax straw, and wool mat treatments compared to the weeded and oat straw treatments. Soil moisture levels in 2001 were greater in the flax and oat straw mulch than the other treatments. Catnip production was greater in 2001 in all mulched and hand weeded plots compared to the weedy plots, with the flax straw mulch producing the greatest yield. In 2002, both herbs yielded significantly greater when grown with flax straw or wool mats. Results of this research indicate the effectiveness of natural mulches for organic medicinal herb production in reducing labor and weed populations.

Corresponding Author Information:

Lisa Duppong Iowa State University 1126 Agronomy Ames, IA 50010 phone: 515-294-5116 fax: 515-294-0730 e-mail: lduppong@iastate.edu

Presentation Information:

Presentation Date: Wednesday, November 13, 2002 Presentation Time: 4:00-6:00 pm Poster Board Number: 1112

Keywords: catnip, St. John's Wort, biochemical analysis, essential oil