

Champion of cover crops: Oats

Consider oats to fulfill your cover crop needs.

Posted on **September 7, 2012** by **Christina Curell** (http://msue.anr.msu.edu/experts/christina_curell), Michigan State University Extension

Oats have been widely used as a cover crop for decades. Their quick growth enables us to plant them after wheat, vegetables, corn silage, etc. They are a truly adaptable and affordable crop that will provide many benefits that farms can see for the following growing season. Oats are a cool season annual grass that grows well during the fall. They can grow up to four feet. Some of those benefits include: forage, weed suppression, nutrient removal, erosion control and soil softening.

Soil and Environmental Conditions

Oats prefer soils that are well drained. The optimum pH range is between 4.5 - 6. Oats prefer moderate soil fertility. If oats are planted with a legume they will scavenge nutrients and enhance the legume stand. Oats will germinate at 38 degrees F. For maximum cover crop benefit oats should be planted six to ten weeks prior to a frost.

Planting and Management

Oats can be drilled, broadcasted or aerial applied. Drilling the oats will provide the best results. If you are going to drill them drill them to a depth of one half to one inch. Seeding rate should be 30-100 pounds per acre, 0.9-3.1 bushels per acre. Seeding rate for broadcasting is 33-110 pounds per bushel, one to three bushels per acre. Aerial rates should be 35-120 pounds per acre, one to four bushels per acre. Rates will vary depending on what the objective of using the oats are and if the oats will be used in combination with other cover crops.

Oats generally will winterkill in Michigan. If they do survive the winter they can easily be killed by herbicide and/or mowing. In an organic or no-till system oats can be terminated by rolling and crimping. Oats should be terminated around the milk or soft dough stage. Waiting too long to kill the oats could result in nitrogen tie up or moisture depletion in the soil.

Oats should be considered planning cover crop choices. For help in determining if oats would fit into your farms objectives contact [Christina Curell](mailto:curellc@anr.msu.edu) (<mailto:curellc@anr.msu.edu>) or [Paul Gross](mailto:grossp@msu.edu) (<mailto:grossp@msu.edu>). To get more information on oats you can visit the [Michigan State University \(MSU\) Cover Crop website](http://www.covercrops.msu.edu) (<http://www.covercrops.msu.edu>) or the [Midwest Cover Crop website](http://www.mccc.msu.edu). (<http://www.mccc.msu.edu>)

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