

Wheat Herbicides & Cover Crops. Cover crops after wheat add diversity to your rotation, benefit soil structure, hold nutrients (especially nitrogen after manure applications) and can generate nitrogen (clovers and other legumes). Corn following wheat in a CSW rotation out yields corn in a SC rotation. Corn after frost seeded red clover into wheat yielded 8 bu/A better than corn after wheat alone in a study by Dr. Bill Deen, University of Guelph.

Herbicides applied to wheat limit your cover crop options and require planning. Only a few weeds (chickweed, bluegrass, cheat grass, downy brome grass) are enough of a threat to wheat to regularly demand a herbicide application.

Starting off weed free is a key, either with tillage or with a Glyphosate application (required if dandelion is a problem). Fall herbicide applications are becoming more popular. Peak was the first (with long plant back restriction for broadleaves), but now many herbicides are labeled for fall application and several have short plant back restrictions. Determining the plant back restrictions for cover crops after herbicide application is key.

"Although few cover crops are listed in these Agronomy Guide tables or on herbicide labels, look for close plant relatives to get an idea of how certain species may succeed For example, there is no listing for the legume hairy vetch or the oilseed daikon radish in the Agronomy Guide or on most labels, but by looking at the alfalfa or clover restrictions or at annual brassica's such as canola you can "guesstimate" which herbicides may cause potential injury to related cover crop species." (from **Herbicides Persistence and Rotation to Cover Crops** (<http://extension.psu.edu/plants/crops/soil-management/cover-crops/herbicide-persistence>) .

Using this method with Table 12 in the MSU 2013 Weed Control Guide for Field Crops, the restrictions for alfalfa would be a best guess for clover, dry beans for large seeded legumes, canola or sugar beets for radishes.