

## Hairy Vetch

The classic definition of a weed is “any plant out of its preferred place”. Hairy vetch (*Vicia villosa*) is a great example of that principle. Many people view hairy vetch as a preferred plant, as it is heavily utilized as a cover crop and as a soil stabilizer for highway construction projects, etc... However, it is also a plant that has high invasivity potential and creates favorable zones for other weed species to invade native settings.

### Biology

Hairy vetch is essentially naturalized in the Midwestern U.S., but originated in Eurasia. It is a perennial legume and a good crop will add 120-180 lbs of nitrogen per acre to the soil for succeeding crops. It's vining, dense growth habit chokes weeds out, so it makes a great cover crop. It also establishes relatively quickly, and has an extensive, yet relatively shallow, root system, helping create stability on slopes, such as road ditches. Lastly, it prefers sandy soil, something not many other perennial legumes have on their resume. It is also relatively attractive, as a stand in full bloom is a carpet of purple flowers.

Those same traits that make it desirable also make it extremely detrimental in situations where it has not specifically been planted. The vining habit allows it to adapt to many situations, as it will stay on top of other plants, up to a certain height, at least. A single plant will have multiple main stems coming out of the crown area, allowing one plant to cover a significantly large surface area, competing for light, water, and nutrients with many of its neighbors. Although a perennial, it does not spread other than by seeds. The seeds are able to survive in the soil for many years, however.

The trait that makes this plant so detrimental in native plant settings is actually its nitrogen adding ability as a legume. Legumes create unnaturally fertile zones in the soil that allow non-native plants to outcompete the native species. This obviously creates problems for those who have planted native areas, but also is an ecological issue in undisturbed natural settings.

### Management

The easy way to manage hairy vetch is to not plant it or allow that first plant you see to set seed. Avoidance of a problem is always easier than fixing it. If you are trying to control hairy vetch in some type of a managed setting, there are a couple control options to consider:

### Physical

Pulling the plants out is reasonably effective in smaller areas or with sparse populations of vetch. The key is to do this prior to seed set. Once the seedpods are set, seeds can be viable. Tillage of any type after germination is also obviously going to do a decent job of controlling vetch, but this would only work in areas where thorough tillage makes sense or in essential monoculture stands that you are destroying. Mowing vetch that is in full bloom down to a very short height will prevent seed set and will actually also kill a good percentage of the plants.

### Chemical

As vetch will most likely show up in mixed plant settings, chemical control is not going to work in most spots. Glyphosate (active ingredient in Roundup) is not effective in killing vetch by itself. You need to add 2,4-D and/or dicamba to the spray mix. A mix of 2,4-D and dicamba will give reasonable control, and allow you to selectively take out vetch and other broadleaf species from a grass area.☛