



## COVER CROP

### Florida Conservation Practice Standard 340 Guidance

Natural Resources Conservation Service (NRCS)

July 2006



#### PURPOSE

The purpose of this guidance is to provide additional information for cover crop as outlined in Florida Conservation Practice Standard, Code 340.

#### PLANTING DATES and METHODS

Planting dates for cover crops vary in Florida due to the varying climatic conditions of the peninsula. The dates listed in Table 1 are for North, Central, and South/South Tropical. The seeds of most cover crops are small and should be covered quite shallow. So, depending on the seed size the planting depth listed in Table 1 range from  $\frac{1}{4}$  to 2 inches. Best germination is achieved with a well-prepared, firm, and moist seedbed. However, minimum tillage techniques are suitable although greater care must be taken in planting. A 20% greater seeding rate is also recommended. Pure live seed (PLS) is the

multiplication of the percent purity and the percent germination.

For example if you have seed that has a purity of 90% and a germination of 80%, then the PLS is 72%. This is the percentage of usable seed that will grow. Be sure to look at the seed tag to find these percentages.

#### PEST PROBLEMS and TERMINATION DATES

One of the potential problems with cover crops is the possibility of it becoming a pest. This is possible when the cover crop is permitted to produce seed, thus allowing the cover crop to germinate and cause a weed problem for the next crop. One solution to this potential problem is to mow the cover crop before the seed matures. Millets and sorghum-sudan hybrids may require one or more mowings during the summer. Depending on how long the cover crop is left on the land and the maturity rating of the variety being used will dictate when mowing is required. Some varieties of sorghum or sorghum-sudan that are very late maturing may not flower before the cover crop is removed or destroyed. Most legumes do not produce an abundance of seed until late in the growing season and so the pest problem is not as severe.

Cover crops can also help with insect, nematode, and disease control. When possible, a cover crop should be used that is a non-host plant for those pests that attack the desirable crop. Hairy Indigo is more resistant to nematodes, however if allowed to set seed it can become a weed/pest in subsequent crops, because of its hard seed coat which allows it to stay dormant in the soil for years. As a general rule use a grass cover crop prior to growing a broadleaf cash crop, and use a

broadleaf cover crop prior to growing a grass crop.

nutrient management plan. See UF/IFAS Circular SL-129 for fertilizer recommendations based on soil test levels for most crops that can be grown as cover crops. See Florida NRCS Conservation Practice Standard, Nutrient Management, Code 590, for guidance on developing a nutrient management plan.

**FERTILIZATION and SOIL ADMENDMENTS**

The amount of lime and fertilizer used will be based on a soil test recommendation or a

**Table 1 – Plants Commonly Used for Cover Crops in Florida**

| Crop                               | Seeding Rate<br>(lb. PLS/ac) | Seeding<br>Depth<br>(in.) | Planting Date    |                 |                         |
|------------------------------------|------------------------------|---------------------------|------------------|-----------------|-------------------------|
|                                    |                              |                           | North            | Central         | South/South<br>Tropical |
| <b>Warm Season, Annual Grasses</b> |                              |                           |                  |                 |                         |
| Mexican<br>teosinte                | Drill 8-10                   | 1 - 2                     | Feb 1 – Aug 15   | Feb 1 – Aug 31  | Feb 1 – Aug 31          |
|                                    | Broad 10-12                  |                           |                  |                 |                         |
| Sorghum-<br>Sudangrass             | Drill 10-20                  | 1 - 2                     | Mar 15 – Jun 30  | Apr 15 – Jul 15 | Apr 15 – Jul 15         |
|                                    | Broad 24-30                  |                           |                  |                 |                         |
| Millet,<br>Browntop                | Drill 8-10                   | ¼ - ½                     | Mar 15 – Jun 30  | Apr 15 – Jul 15 | Apr 15 – Jul 15         |
|                                    | Broad 15-20                  |                           |                  |                 |                         |
| Millet, Dove<br>Proso              | Drill 8-10                   | ¼ - ½                     | Mar 15 – Jun 30  | Apr 15 – Jul 15 | Apr 15 – Jul 15         |
|                                    | Broad 24-30                  |                           |                  |                 |                         |
| Millet, Pearl                      | Drill 12-15                  | ½ - 1 ½                   | Feb 1 – Jun 30   | Mar 15 – Jun 30 | Mar 1 – Jun 30          |
|                                    | Broad 24-30                  |                           |                  |                 |                         |
| Millet,<br>Japanese                | Drill 25-30                  | ¼ - ½                     | Mar 15 – Jun 30  | Apr 15 – Jul 15 | Apr 15 – Jul 15         |
|                                    | Broad 15-20                  |                           |                  |                 |                         |
| <b>Cool Season, Annual Grasses</b> |                              |                           |                  |                 |                         |
| Ryegrass                           | Drill 10-20                  | 0 – ½                     | Oct 1 – Nov 15   | Oct 15 – Nov 25 | Oct 15 – Nov 31         |
|                                    | Broad 20-30                  |                           |                  |                 |                         |
| Rye                                | Drill 56                     | 1 – 2                     | Oct 15 – Nov 25  | Nov 1 – Dec 1   |                         |
|                                    | Broad 112 –<br>140           |                           |                  |                 |                         |
| Oats                               | Drill 64                     | 1 – 2                     | Sept 15 – Nov 15 | Oct 1 – Nov 15  |                         |
|                                    | Broad 96 –<br>128            |                           |                  |                 |                         |
| Wheat                              | Drill 60                     | 1 – 2                     | Oct 15 – Nov 15  | Nov 1 – Dec 15  |                         |
|                                    | Broad 120 –<br>150           |                           |                  |                 |                         |
| Triticale                          | Drill 48                     | 1 – 2                     | Nov 15 – Dec 15  | Oct 15 – Nov 15 |                         |
|                                    | Broad 96 –<br>120            |                           |                  |                 |                         |
| <b>Warm Season, Annual Legumes</b> |                              |                           |                  |                 |                         |
| Aeschynomene                       | Drill 4 – 6                  | ¼ - ½                     | Feb 1 – Jun 30   | Mar 15 – Jul 15 | Mar 15 – Jul 15         |
|                                    | Broad 6 – 8                  |                           |                  |                 |                         |

Section IV

|                                       |                                |         |                 |                 |                 |
|---------------------------------------|--------------------------------|---------|-----------------|-----------------|-----------------|
| Partridge Pea                         | Drill 3 – 5<br>Broad 4 – 7     | ¼ - ¾   | Feb 1 – Jun 30  | Mar 15 – Jul 15 | Mar 15 – Jul 15 |
| Florida Beggarweed                    | Drill 2 – 5<br>Broad 10        | ¼ - ½   | Mar 30 - Jun 30 | Mar 15 – Jul 15 | Mar 15 – Jul 15 |
| Lespedeza                             | Drill 15 – 22<br>Broad 20 – 30 | ¼ - ½   | Feb 1 – Jun 30  | Mar 15 – Jul 15 | Mar 15 – Jul 15 |
| Cowpeas                               | Drill 60 – 90                  | 1 – 1 ½ | Mar 15 – Jul 15 | Feb 1 – Jun 30  | Sept 1 – Apr 1  |
| Sun Hemp                              | Drill 30 – 50<br>Broad 40 - 60 | ½ - 1   | Mar 1 – July 30 | Mar 1 – July 30 | Aug 1 – Nov 1   |
| <b>Warm Season, Perennial Legumes</b> |                                |         |                 |                 |                 |
| Perennial Peanut                      | Sprig 800 – 1000 lbs/ac        |         | Jan 1 – Mar 15  | Jan 1 – Mar 15  | Jan 1 – Mar 1   |
| <b>Cool Season, Annual Legumes</b>    |                                |         |                 |                 |                 |
| Clover, Crimson                       | Drill 15 – 20<br>Broad 20 – 26 | ¼ - ½   | Oct 1 – Nov 15  |                 |                 |
| Clover, subterranean                  | Drill 10 – 15<br>Broad 18 – 22 | ¼ - ½   | Oct 1 – Nov 15  | Oct 1 – Nov 15  |                 |
| Vetch, Common                         | Broad 40 – 50                  | 1 – 2   | Oct 1 – Nov 15  | Oct 1 – Nov 15  |                 |
| Vetch, Hairy                          | Broad 20 – 30                  | 1 - 2   | Oct 1 – Nov 15  | Oct 1 – Nov 15  |                 |
| <b>Cool Season, Perennial Legumes</b> |                                |         |                 |                 |                 |
| Clover, Red                           | Drill 9 – 11<br>Broad 12 – 15  | ¼ - ½   | Oct 1 – Nov 15  |                 |                 |
| Clover, White                         | Drill 2 – 3<br>Broad 3 – 4     | 0 – ¼   | Oct 1 – Nov 15  | Oct 1 – Nov 25  | Oct 15 – Nov 31 |

**REFERENCES**

University of Florida, Institute of Food and Agriculture Science (UF/IFAS) Documents:  
 Cover Crops (SS-AGR-66)  
 Selected Legumes Used as Summer Cover Crops (ENY-688)  
 Standardized Fertilization Recommendations for Agronomic Crops (SL-129)

Florida NRCS Conservation Practice Standards:  
 Cover Crop, Code 340  
 Nutrient Management, Code 590