



## Sweet Clover



There are two types of sweet clovers usually used for the production of nectar. The first, yellow blossom (*Melilotus officinalis*) and white blossom (*M. alba*) are predominately biennials. The second is Hubam sweet clover, an annual white flowered species.



The biennial species usually make one branched main stem in the first year and multiple stems rise from the crown in the second year. The biennial species often produce seeds and die. The abundance of flowers is affected by the amount of competition from weeds and other species but if the seed set is good, the seeds may fall to the ground and produce volunteer stands in future years. Yellow flowered varieties usually begin blooming about two weeks before white flowered varieties so, for near production, a mixture of the two give the advantage of an extended season of bloom.



The annual species, Hubam, when spring seeded, begins blooming in late summer and produces flowers until the plants are killed by frost. One hive per acre is usually enough to give adequate pollination of the flowers for both annual and biennial species.



The biennial species are usually best sown in the spring, especially in northern latitudes. However, late summer seeding can be acceptable although production in the second year may be reduced somewhat. The annual Hubam sweet clover must be seeded in the spring in northern latitudes as the plants are killed by frost. It can be grown as a winter annual in the deep South where plants will not be killed by frost. Seeding dates for biennial species should be from late February in the upper south to mid March in the north through early May, or in late August or early September. Annual Hubam sweet clover should be sown after all danger of heavy frost is past.



Plant sweet clover seed at a rate of 10 to 15 lbs. per acre on a well prepared, firm seedbed. Use higher rates when broadcasting, lower rates when using a drill designed for this purpose. In the upper South and lower Midwest seed can be sown on frozen ground if competition from weeds or grasses is controlled. Seeding on a prepared seedbed is usually more dependable. Use 25% more seed when attempting to make seeding on frozen ground or if controlling competition from weeds or other crop species will be difficult.



Sweet clover will grow on most any type of soil but is best adapted to a deep, well drained, loamy soil. It will grow on wet natured or soils low in fertility but, for maximum production, fertilizer requirements for sweet clover are similar to alfalfa. Like other legumes, it does not require the application of additional nitrogen. A most important aspect of fertilization of sweet clover is soil pH. Soil should be limed to bring it to a pH of 6.5. A soil test will be the best guide for amounts of additional lime, phosphorus and potassium needed. In the absence of a soil test, adding 1 to 2 tons of ag lime and 40-60 units of phosphorus (P205) and 60-90 units of potassium (K20) per acre, or 200-300lbs of an 0-20-30 fertilizer per acre would be a good starting point.



If any of the growth is to be removed as hay or pasture, additional fertilizer to replace what is removed in the crop should be added. Sweet clover can be used for hay or pasture. However, there are some dangers to livestock if not properly managed so consult with your county agent to obtain more information before you feed sweet clover to livestock. Grazing or mowing to a height of less than 6 in. can cause reductions in re-growth or in stands of biennial sweet clover surviving through the winter.



Sweet clover is bothered by few insects or diseases. Crop rotation is always a good practice if a continuous stand of sweet clover is desired. Because stands of biennial sweet clover often do not last for more than two years unless re-established from volunteer seed, seeding some every year will help to insure a constant supply.