Many pollinator species of insects have seen sharp population declines over the past decade. At the center of this crisis has been the honey bee. An epidemic known as colony collapse disorder has resulted in the loss of over 1/3 of managed bee colonies since 2006. Scientists believe a combination of factors have contributed to this loss of bees including harmful disease and insect pests along with the loss of natural bee habitat and food sources.

Through research, apiculturists have discovered and are promoting best management concepts designed to promote the growth, health and sustainability of the bee population. One such practice being promoted is the establishment of so-called “bee gardens” or “bee meadows” containing blooming plants that provide the abundant pollen and nectar needed by bees to flourish and reproduce. Plants most desirable for bee gardens or meadows are those that bloom profusely over a long period of time after year and possess self-sustaining, low maintenance traits. One such plant many beekeepers have found to possess these desirable traits is Pennington’s Durana white clover.

Durana is a perennial legume that lasts multiple years (3-5 years or longer) under good management. It is heat and drought tolerant and competes well with grass and weeds. It is self-sustaining only requiring an occasional clipping to remove old growth and to keep weed and grass competition in check. While these attributes set Durana apart as a superior clover, its profuse flowering trait is what makes it a highly desirable “bee garden/meadow” plant. In research trials, Durana produced 38-44% more blooms than ladino white clover types and did so over a long period of time stretching from spring through late summer.

Creating Pollinator Sites with Durana
Converting many landscapes into pollinator friendly ecosystems is easier than you think! Maintained areas that currently exist as stands of cool or warm season perennial turf grasses can simply be over-seeded with Durana to create a landscape in which honey bees and other pollinators will thrive. In addition, backyard garden beds, highway right-of-ways, airport properties, powerline/pipeline areas, thinned pine plantation lanes and wildlife food plots can all provide excellent pollinator forage areas when seeded or over-seeded with Durana. Durana seed are conveniently packaged for both homeowner and commercial use in either 5 lb. or 25 lb. bags. Seeding rate is 3-4 lbs./A when seeded into existing grass landscapes or meadows and 5-8 lbs./A when seeded alone.

Durana Clover Pollinator Benefits

- Perennial Plant – lasts multiple years
- Prolific Bloomer – 40% more blooms than Ladino clover
- Blooms Spring - Late Summer
- Self Sustaining & Low Maintenance
- Heat and Drought Tolerant
- Competes with Grass and Weeds
- Improves Soil Tilth and Organic Matter
- Attracts Beneficial Insects
Where to Plant:

- **Primary Adaptation**
- **Adapted to Some Sites**

Name: Durana White Clover (Trifolium repens)

Type: Cool season perennial legume

Adaptation:

From eastern Texas and Oklahoma across the south to the Atlantic coast and north along a line from Macon, GA to Dallas, TX. Also, on loamier soils in the Coastal Plain region of the Southeastern U.S., the Pacific Northwest and in river valleys and certain irrigated areas of the western U.S.

Benefits:

Durana is a perennial plant that offers year round sustainable and low maintenance vegetative cover only requiring an occasional clipping to remove old growth and to keep undesirable weeds and grasses in check. It is highly persistent with excellent drought, cold, heat and grazing tolerance. Durana’s profuse flowering trait makes it a highly desirable pollinator plant. In University research trials, Durana produced 38-44% more blooms than ladino white clover types and did so over a long period of time stretching from spring through late summer. As a legume, Durana captures atmospheric nitrogen ranging from 75 to 150 lbs. per acre or more per year. Builds soil organic matter and improves soil tilth. Used for multiple purposes including livestock forage, wildlife food plot, erosion control and orchard floor cover. Serves as a host for many beneficial insects and attracts both game and non-game birds.

Planting:

**Planting Dates:**
- **South:** September - November... may be frost seeded in February to early March in some locations.
- **Upper South:** September - early November... may be frost seeded in February to early March or spring planted in April - early May.
- **North:** August – September ... may be frost seeded in February - March or spring seeded in April – May.

**Method:** Broadcast seed on an exposed soil surface with a seeder designed for sowing small seed. Using a culti-packer or similar roller device following seed application helps ensure good seed/soil contact improving stand emergence. Seed can be drilled with a no-till planter equipped with a small seed hopper. Seed at a maximum depth of 1/8 inch. Planting clover seed too deep can result in stand failure.

**Rate:**
- 3 lbs/acre (1.0 oz/1000 sq.ft.) if no-till drilled or broadcast into established pastures, meadows, landscapes or garden spots; increase to 4 lbs./acre (1.5 oz/1000 sq.ft.) if frost seeded;
- 5 – 8 lbs./acre (1.8 oz – 3 oz/1000 sq.ft.) for a pure stand.

**Depth:** 1/8” maximum (stand failures will result from seed planted too deep).

**Fertilizer:** Soil testing is highly recommended. Liming to a pH of 6.0-6.5 and providing adequate levels of potassium and phosphorus are necessary to ensure a productive clover stand.

**Inoculant:** Durana seed come pre-inoculated with selected Rhizobia strains of bacteria for optimal root nodulation and nitrogen fixation.

Management:

Once established, Durana does not require nitrogen fertilizer. Periodic clipping of excess forage down to a 4-8” height encourages clover blooming, lessens weed competition and helps prolong clover stand life. Maintain proper soil pH, phosphorus and potassium levels through periodic soil testing.