**Lactuca sativa** L.

**Lettuce**

**Other Common Names:** Cabbage Lettuce, Common Lettuce, Cos Lettuce, Curled Lettuce, Garden Lettuce, Head Lettuce, Leaf Lettuce, Romaine Lettuce.

**Family:** Compositae (Asteraceae).

**Cold Hardiness:** Cool season annuals, transition season annuals, or fall planted biennials; variable in cold tolerance by cultivar from USDA zone 6 to 8, none are particularly heat tolerant.

**Foliage:** Evergreen; alternate on flower stalks or tightly compressed in the rosette stage; simple to pinnatifid; ovate to orbiculate; sessile or clasping the stem; most common garden varieties have leaves 6" to 8" long, but some cultivars can have leaves up to 12" long; margins entire, sinuate, or undulate; glabrous; bright green, dark green, yellow-green, to red-bronze; the foliage can be pleasing in form; edible prior to full maturity, thereafter bitter.

**Flower:** Small, ¼" to ½" diameter, composite heads in irregular dense corymbose panicles atop elongated flowers stalks; plants “bolt” when mature and environmental conditions are appropriate; longer days and warmer temperatures favor bolting; mostly pale yellow; not ornamental.

**Fruit:** Tiny achenes, almost dust-like or chaff-like in some cultivars; tan, brown to black in color.

**Stem / Bark:** Stems — green, sometimes reddish; stems are mostly unbranched, usually short and succulent; some cultivars have fattened stems that are actually cooked and used as vegetables, but these are virtually unknown in this country; Buds — foliose; tiny; green to reddish, sometimes almost translucent; often nearly embedded in the stem; Bark — none is formed.

**Habit:** Short stature annuals or biennials with leafy rosettes of foliage 6" to 10" tall, which may or may not form a tight “head”; ‘Romaine’ types are more upright to about 12" tall; once plants become mature and weather conditions warm, the central stem elongates to form a flower stalk up to 3 ft tall.

**Cultural Requirements:** Lettuce is fairly easily grown from either seed or transplants; direct seeding of head forming types should be done in fall, whereas direct seeding can be accomplished for leaf type lettuces beginning anytime after temperatures cool in autumn and proceeding into spring as long as there is enough time for a crop to mature; all lettuce varieties require a rich highly organic well drained soil and adequate moisture; plants should receive at least eight hours of direct sunlight per day; head forming varieties perform much better in cooler climates, whereas the leaf type lettuces make much better displays and are easier to grow in our region; leaf types typically mature in 45 to 60 days from seed, while the head forming varieties require 80 to 90 days; mulching, periodic fertilization, and regular irrigation are required to maintain top quality plants.

**Pathological Problems:** Some foliar diseases and stem rots can occur; botrytis and downy mildew are common; mulching will reduce soil splash and thinning to allow adequate spacing will encourage good air flower around plants; several chewing insects, cutworms, slugs, snails, and aphids can be problems; nematodes can be problematic on certain soil types; larger herbivores including rabbits, rats, and deer will feed on the young plants.

**Ornamental Assets:** This species offers a wide range of richly colored foliage with many leaf patterns and is tolerant of moderate frosts.

**Limitations & Liabilities:** Plants grow rapidly and will quickly bolt when conditions become favorable in spring, resulting in a loss of the desirable growth form and ending the useful life of the plants from a landscape perspective; several foliar pests and diseases can cause occasional problems.

**Landscape Utilization:** Although the primary use of common lettuce in the landscape is in vegetable gardens, the bright green to red-bronze foliage can be used as a showy foliage plant, ala ornamental
cabbages or kales; lettuce makes a nice winter edging for mixed plantings; when massed lettuce can be used as a winter or spring bedding plant or as a contrast to species with showy flowers; specialty and logo designs can be created using the varied foliage types and colors; this might be a useful fast growing alternative for producing a winter groundcover in small spaces; a resurgence of popularity of container gardening has created a year-round interest in patio containers or decorative planters, with lettuce serving as a good foliage plant as filler or background to showy flowering plants for cool season containers; obviously, ornamental plantings can double as a source of edible foliage.

**Other Comments:** Harvesting of head types for edible foliage occurs as with cabbage, picking plants when the tightly packed ball of leaves forms in the center of the plant; with leaf types, entire plants can be harvested as plants reach an optimal size, or the outer leaves can be harvested individually as they mature; plants should be maintained in a rapid growing state to reduce the development of bitter chemicals in the mature leaves; the more latex that is present, the poorer the quality of the leaves.

**Native Habitat:** *Lactuca sativa* is a garden species derived from hundreds, perhaps thousands, of years of selection from *Lactuca serriola* L., the wild Prickly Lettuce of Eurasia and North Africa.

**Related Taxa:** Many cultivars are available on the market with new ones being added each year; in recent years an increased emphasis has been placed in selection of some cultivars for appearance rather than taste as was common in the past; former Texas Extension Service specialist, Dr. Sam Cotner (1998), recommends the leaf type cultivars ‘Black Seeded Simpson’, ‘Buttercrunch’, ‘Paris Island Cos’, Red Snails’, ‘Romaine’, ‘Ruby’, and ‘Salad Bowl’ for edible purposes; if one wishes to try to grow head types, Dr. Cotner recommends ‘Great Lakes’, ‘Iceberg’, ‘Mission’, and ‘Vanguard’; see Phillips and Rix (1994) for outstanding photographs of many varieties with ornamental potential.