

Annual Wildflower Addition

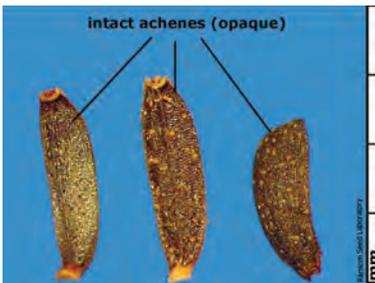
When planning a seeding that includes perennial wildflowers, you may want to consider adding an annual to the mix. Annual wildflowers generally germinate and establish more readily than perennials. They could provide color, cover, pollen, and forage the year of seeding. They could also act as a marker for finding the perennial wildflower or grass seedlings in the mix.

An annual wildflower to consider is *Coreopsis tinctoria* Nutt. Its many common names include: plains coreopsis, tall plains coreopsis, annual coreopsis, golden coreopsis, calliopsis, dyers calliopsis, goldenwave, and golden tickseed. While this species is not a good option for all plantings, it may be something to consider for selected sites.



Maroon-centered yellow flowers of plains coreopsis

Description: Plains coreopsis is an annual species of the Composite (Sunflower) family. The plants are slender and grow 1-2 feet tall. Leaves are dark green, pinnately compound, smooth and shiny. Flowering in the Northern Great Plains is from June through September.



Seed of *Coreopsis tinctoria* (photo credit: Ransom Seed Laboratory, Carpinteria, California)

The abundant, small daisy-like flowers are yellow with maroon or reddish-orange centers. Petals are notched at the tips. Coreopsis is derived from the Greek "korus" which refers to the resemblance of seed to bedbugs. There are approximately 1,650,000 seeds in a pound.

Preferred growing conditions: It is native to much of the U.S. including the Dakotas and Minnesota. It is widespread in the Western and Southern U.S. in disturbed areas such as moist ditches. It will grow in full sun or partial shade. It can tolerate various soil types, but prefers moist, sandy or loamy well drained soils. Some literature also suggest that it tolerates droughty soil of low fertility. Studies in Oklahoma suggest that burning reduces the frequency of the plant in the wild. Coreopsis does not



Various forbs (including plains coreopsis) and grasses planted at the Robert L. Morgan Wildlife Management Area, North Dakota

appear to be a good competitor. In a Texas study, it was a poor competitor in the presence of sideoats grama, but filled in the open gaps at the site.

Propagation in the Northern Great Plains: Seed can be sown in fall or early spring. The seed readily germinates (generally within 10 days) with no seed treatment. As some studies indicate that light increases germination, the seed should be planted very shallow or with minimum cover. The plant can self-sow from the abundant seed it produces if there is bare ground present. This may provide opportunity for this annual species to contribute to the planting for more than one year. The suggested NRCS full seeding rate in North and South Dakota is 25 seeds/ft² or 0.7 PLS pounds/acre. Due to their growth habit, annuals such as plains coreopsis should be limited to no more than 10% of the total mixture. Consult the FOTG for adaptation recommendations and planting details.

Insect/wildlife use: The flowerheads of *Coreopsis* spp. provide nectar and pollen to a wide variety of insects, including long-tongued bees, short-tongued bees, wasps, flies, butterflies, skippers and beetles. The leaf beetle *Calligrapha californica* has been found feeding on the foliage of plains coreopsis.

Other characteristics: The species is widely cultivated as an ornamental because of its ease of establishment and showy color. It has escaped from cultivation in southern and eastern states where moisture is abundant. An infusion of the flower has been traditionally used in many countries to control hyperglycaemia. Extractions from the flower have also been used as dyes. Tea of *Coreopsis tinctoria* is also thought to have antioxidant and antihypertensive effects.

As conservation plantings are planned for 2015, consider incorporating showy and colorful *Coreopsis tinctoria*.