

PLANTING GUIDE

Sorghastrum nutans (L.) Nash

Common Names:
yellow indiangrass

Accession Numbers/Releases:

9062316 Zone 1 – Northern Iowa Germplasm

9062317 Zone 2 – Central Iowa Germplasm

9062318 Zone 3 – Southern Iowa Germplasm

Description:

Indiangrass is a tall, warm-season perennial native grass which grows 2.5 to six feet tall some-times as much as eight feet. Indiangrass is found throughout the prairie area, especially in conjunction with the bluestems. It generally favors more Mesic sites than those preferred by big bluestem. Early growth resembles that of big bluestem, but it is generally a lighter green. Stems are stout, erect, and unbranched. They are smooth except for a covering of soft, silky, golden hairs at the nodes. The extensive root system produces short, scaly rhizomes as one means of reproduction. The leaves usually less than two feet long, are rather stiff and straight. Spreading from the stem at about a 45 degree angle, the leaves are about 1/4 to more than 1/2 inch wide, narrowing where they join the sheath. Leaves are rough to the touch and have a whitish bloom. Leaf sheaths tend to be smooth, although the lower ones may be slightly hairy. The ligule (the collar formed by the joining of the leaf blade and the leaf sheath) usually extends less than 1/8 inch upward. It forms a clawlike projection, a characteristic of the species that is sometimes referred to as being “similar to a rifle sight.” The conspicuous yellow anthers give the 4-12 inch long flower heads a yellowish appearance. Within the head are numerous individual branches two to four inches long. Each branch is erect, becoming nodding at the tip as the seeds mature. Spikelets 1/4 to 1/3 inch long have two outer glumes. These glossy bronze-colored glumes have fawn-colored hairs. The fertile spikelet is tipped with an awn about three times as long as the spikelet itself. The awn has a slight bend; it is closely spiraled from the base to the bend and loosely twisted toward the tip. Opposite each fertile spikelet is a rudimentary one, often just a tiny, hairy stalk.

Purpose: Indiangrass can be used in the following situations: roadside plantings, range seedings, pasture seedings, prairie restoration, prairie landscaping, wildlife cover, and as a border for wildflower gardens because of its showy appearance.

Habitat/Range: Indiangrass is common in mesic to dry prairie as well as pastures, fields, and open savanas throughout the tallgrass region.

Source: Seed of these accessions 9062316, 9062317 and 9062318 were collected from native stands located in Northern (Zone 1), Central (Zone 2) and Southern (Zone 3) counties respectively of the state of Iowa.



Establishment (for seed production): Prepare a clean weed free seedbed by disking and harrowing or chemical weed control. Firm the seedbed by cultipacking. Seedbed should be firm enough to allow the seed to be planted 1/4 inch deep. Indiangrass can also be no-tilled into sod or crop stubble using appropriate no till equipment and chemical programs

Plants are cross-pollinated, so for seed production, to prevent crossing, plant 900 to 1,000 feet from other varieties or accessions.

Indiangrass grows well on deep to shallow, sandy to fine-textured and rocky soils. Seed can be planted in the spring or a dormant seeding can be made in the fall or winter. The seedlings are vigorous; therefore, new plantings can be established quickly. It is ordinarily ready for harvest from September in the South to October in the northern part of the Midwest region.

Fertilizer: Apply no fertilizer the establishment year unless soil test indicates a severe deficiency of potassium and/or phosphorus. Use no nitrogen during the establishment year as this can encourage weed competition.

Seeding Rates (for seed production): Seeding rates for indiangrass should be about 7-10 pounds of pure live seed (PLS) per acre in 30 inch rows. An average pound of indiangrass contains approximately 175,000 seeds (debearded).

For solid stand production, drill three times the seeding rate of row production to maintain 40 PLS per square foot.

For prairie restoration or diverse plantings for wildlife refer to NRCS Iowa – 327 Conservation cover Standard that pertains to this species.

Seeding Dates: Spring (April to June) or a fall dormant seeding (November to March).

Management: Reduce weed competition by mowing or cultivating between the rows of indiangrass. For broadleaf weed control use of 2 4-D herbicide can provide weed control and will encourage a good stand. Use label recommendations for application.

Note: Herbicide products may not be registered on this grass species in your state. NRCS does not endorse the use of any product.

See NRCS Iowa Prescribed Burning Practice Code 338 on burning criteria. Burning may be appropriate where plant vigor declines in native plant species or where invader species threaten or native mix stand.

Availability of Plant Materials: Breeders material is being produced in limited supply by the Plant Materials Center, located at Elsberry, Missouri.

Source identified seed will be released to interested commercial seed growers.

A list of commercial growers can be obtained from the Elsberry Plant Materials Center or the Iowa Crop improvement association – The Iowa Seed Directory.

References

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Gray's Manual of Botany, p. 234; Fernald, M. L.; Harvard University, Boston, Mass. 1950.

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The Prairie Garden, 70 Native Plants You Can Grow in Town or County; pp. 19, 26, 186-187;., Smith, J. Robert and Smith, Beatrice S., University of Wisconsin Press, Madison, Wisconsin 1980.

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