



Mexican Gold™

BIDENS FERULIFOLIA

RECEIVING UNROOTED / CALLUSED CUTTINGS

Open the boxes upon arrival. Cuttings should be stuck as soon as possible. Cuttings may be temporarily stored overnight in open boxes at 45 – 50°F (7 – 10°C) with relative humidity above 70%. Keep all cutting label information and place these tags with the cuttings in propagation.

ROOTING UNROOTED CUTTINGS

Root Emergence: 7 – 10 days.

Total Rooting Time: 4 weeks.

Preparation Prior to Arrival of Cuttings: Clean and disinfect propagation area. Place rooting media on bench shortly before arrival of cuttings. Preservation of cutting quality is dependent upon how quickly cuttings are stuck.

Rooting Hormones: Rooting hormones generally are not needed if adequate bottom heating is used during propagation. Mexican Gold roots quickly without rooting hormones. If growers do decide to use rooting hormones, a 0.1% (1,000 ppm) IBA concentration is a good starting point. Excess application of rooting hormones can cause burning and damage to cuttings.

Misting: Mist schedules vary depending on light and temperature conditions; however, Mexican Gold Bidens can come off of mist relatively quickly (similar to other fast rooting annuals like petunia, bacopa, verbena, etc.). After sticking, apply sufficient moisture to rehydrate the cuttings and keep them from wilting. Cuttings should be hydrated and in a non-wilted stage within 24 hours after sticking. Capsil (a spray adjuvant) can be sprayed on the cuttings 1 – 2 days after sticking to help in water rehydration of the cuttings. Many growers combine the Capsil with an early fungicide application. Misting should be significantly reduced after roots begin to form on the cuttings.

Disease Control: A preventative fungicide spray a few days after sticking will help prevent Botrytis infections. Common fungicides include Decree, Chipco 26019, Daconil, Spectro, Heritage and Medallion. A follow-up spray can be given about 5 – 7 days after the first application depending upon disease pressure. Plants can be given a fungicide drench after roots develop to prevent fungal root rot. Broad spectrum drenches, such as Subdue Maxx + Medallion or Truban + Cleary's 3336 (i.e. Banrot) work well to control a range of pathogens.

Moisture: Avoid over-saturated media and over-misting, especially under dark, cloudy conditions. Choose a propagation media that is well-drained and offers adequate aeration.

Ventilation: Avoid heavy drafts in the propagation area that can cause edges of benches to dry more quickly than the centers, especially early in the rooting process. After roots develop, air movement can be increased to reduce Botrytis infections.

Air Temperature: Can vary between 68 – 75°F (20 – 24°C) depending upon how much top (shoot) growth is desired. As rooting increases, air temperature generally should be reduced to control top growth and tone the cuttings.

Bottom Heat Temperature: The first three weeks bottom temperatures should be between 70 – 73°F (21 – 23°C). After roots are well developed, temperatures can be lowered to hold and tone the cuttings.

pH: 5.8 – 6.2.

Media EC: Between 0.7 – 0.8 mS/cm (low nutrient charge).

Light: Maintain light levels between 1,000 – 1,200 foot candles for the first two weeks after sticking or until root development occurs. Light levels can be increased up to 3,000 foot candles as rooting increases and the cutting matures.

Fertilizer: Begin fertilization at 100 ppm nitrogen when roots become visible. Rates can be increased up to 200 ppm after roots become well developed. Use primarily Cal-Mag (calcium nitrate + magnesium nitrate) fertilizers in propagation to prevent unwanted stretch.

FINISHING ROOTED CUTTINGS

Mexican Gold Bidens is a moderately vigorous plant with a bushy to semi-trailing growth habit. In the landscape, it forms a mound of bright yellow-gold flowers and is useful in ground beds, window boxes, patio containers and mixed plantings. In

the greenhouse, Mexican Gold makes colorful baskets, but can also be grown in 4", 6" and 1-gallon containers.

Disease Prevention/Sanitation: Prior to arrival of rooted cuttings, have benches clean and disinfected. Try not to store rooted cuttings more than a day or two before transplanting.

Media: Select a porous media that drains well. Many good, well-drained commercial mixes can be used with Mexican Gold Bidens.

Pre-Plant: Make sure the media to be transplanted in is moist, but not saturated. Don't plant cuttings into extremely dry media. Dribbling a small hole into the media will help in the transplanting process.

Transplanting: Transplant directly into the finished container with the rooting media slightly below the level of media in the containers. Make sure that the root ball is covered and that the cutting is situated in the center of the pot.

Media pH: 5.8 – 6.2.

Moisture: Media should be allowed to dry moderately between irrigations. Do not overwater Bidens, especially early in production.

Fertilizer: Mexican Gold Bidens is a moderate feeder. Use a rate of 200 ppm nitrogen with each irrigation and adjust rates as needed. Leach with clear water as needed to avoid fertilizer salt buildup. Mexican grows best when using a mix of (or alternating with) Cal-Mag (i.e. 15-5-15, 14-4-14, etc.) and ammonium-containing (i.e. 20-10-20, 15-15-15, etc.) fertilizers.

Media EC: 1.8 – 2.2 mS/cm in a saturated media extract (SME).

Temperature: 65 – 75°F (18 – 24°C) day and 55 – 65°F (13 – 18°C) night.

Light: 4,000 – 7,000 foot candles. Mexican Gold Bidens grows best under high light conditions. Supplemental lighting can be used in northern climates under dark, cloudy conditions.

Pinching: A soft pinch to 2 – 3 nodes shortly after transplant will encourage more uniform branching. Plants can also be pinched during the later stages of propagation and this is useful for quick cropping in smaller pot sizes. A second pinch can be given on plants grown in very large containers with longer cropping times.

Growth Regulators: Mexican Gold Bidens is a moderately vigorous grower and might need chemical growth regulator treatments under certain growing conditions. Sprays of B-9 or Dazide at 2,500 ppm will help keep the plants more compact.

Common Pests: Whiteflies can be a problem under severe insect pressure. Scout plants regularly and treat as needed with appropriate chemical and biological controls. Chemicals such as Endeavor, Sanmite, Judo, general pyrethroids (Talstar, Decathlon, Mavrik, Astro, etc.), neonicotinoids (Marathon, Safari, TriStar, Flagship, Celero, etc.), insect growth regulators (Distance, Enstar, etc.) and insecticidal soap all work to control Whiteflies.

Common Diseases: A preventative broad-spectrum fungicide drench can be applied shortly after transplanting, especially under cool, wet growing conditions.

GARDEN PERFORMANCE

USDA Hardiness Zone: Not hardy.

AHS Heat Zones: 3 – 11.

	Garden Height	Garden Width
Mexican Gold	12 – 14" (30 – 36 cm)	14 – 18" (36 – 46 cm)

BIDENS SCHEDULING IN WEEKS

	Mexican Gold
Rooted to 4" finish	5 – 6 (1 plant/pot)
Rooted to 1-gallon	10 – 11 (1 – 2 plants/pot)
Rooted to 10" basket finish	10 – 11 (3 – 4 plants/basket)

Note: These suggestions are only guidelines and may have to be altered to meet individual grower's needs. Check all chemical labels to verify registration for use in your region.