

Gaillardia

If you're hungry for more gaillardias, after last month's "Perennial Solutions" profile of 'Fanfare', here is everything you can want to know about this extremely colorful, nearly bullet-proof crop.



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Above and below: 'Torch Yellow' (Photos courtesy of Rick Schoellhorn)

Named after a French botany patron, M. Gaillard, gaillardia (blanket flower) has been a staple of the highway wildflower seed program for decades and is the state flower of Oklahoma. The genus has a reputation for being tough, salt tolerant, drought tolerant and deer proof. In general, the crop can be summed up, in the words of one of Florida's theme park director as "butt hardy," which means that the plant can handle people sitting on it and still bounce back. (In theme parks, unlike other public spaces, the average "vacationer" seems to think the ticket price includes lying,

rolling or sending children into the flower bed!) Gaillardia also attracts bees, butterflies and birds, so market them accordingly for the nature-gardening public.

Like last month's article on purslane and portulaca there are both seed and vegetative forms of gaillardia available on the market, and which cultivars you use in your operation can be adjusted for whichever means of propagation best suits you or the level of uniformity you desire in the crop. Finding gaillardia suppliers can be a bit confusing because the crop is listed under perennials, biennials and annuals, depending on which supplier you are talking

to. In most regions of the United States, gaillardia is a reseeding annual, although in mild winter areas it may remain green for a year or more.

STUDYING FOR THE TRIALS

We were field trialing native plants last year, and one of our native plant specialists provided us with a native form of *Gaillardia pulchella* (a parent of the *G. grandiflora* hybrids) that received top honors for constant color and high-impact flowering. In light of last year's trials, we are doing a focus trial on the entire genus in our field trials this year to look at how each commercial cultivar performs in comparison to the native species. This article was my way of

doing my homework before we begin trialing in March.

There are about 30 cultivars on the market, but they are almost all from the hybridization of two native species. *G. aristata* (native to North America) and *G. pulchella* (native to Mexico and the Southern United States) are the parents of *G. x grandiflora*. *G. aristata* is from the high plains and gives its progeny cold hardiness, while *G. pulchella* provides the heat tolerance and humidity tolerance of the Sunbelt. *G. pulchella* also has a slightly more succulent leaf than *G. aristata*. For most of us, the difference between the two is probably not obvious but still kind of neat to know. If you talk to botanists, they will tell you that there are a hundred different forms of the two species floating around as well, just to keep us all confused.

Gaillardia aestivalis is a species that generally has an incomplete single flower with petals separated by large gaps around the central disc. Flowers may be white, yellow or reddish purple. *Gaillardia pinnatifida* is very similar to *G. aestivalis* with pinnate leaves. All of these species will intercross, so expect a lot of overlap in naming and growth habits.

GAILLARDIA VARIETIES

Gaillardia x grandiflora 'Goblin' was the standard cultivar for many years, but the actual color (red ver-



Culture Quickie: Gaillardia

Fertilization. 150 ppm balanced is fine; avoid high levels of ammonium nitrogen.

Watering. Do not keep wet for long periods. Most gaillardia are adapted to drier environments, and over watering leads to root rot.

Media. Well-drained peat-lite type with pH of 5.5-5.8.

Temperature. 60° F nights and 85° F days; cooler night temperatures help with basal branching.

Light. As high as possible (5,000-8,000 foot-candles) at all times for best branching, flowering and highest plant quality.

Propagation. Seed, cuttings (rooting media temperatures 65-75° F), division.

Timing. Propagation of cuttings takes four weeks; seedlings about six weeks, seed to transplant. Plug to finished 1-gal. takes about 8-10 weeks, depending on environment.

Growth regulators. You can use water stress, light stress and temperature to control growth somewhat. Otherwise daminozide (B-Nine) at 2,500 ppm multiple applications or one application of 5,000 ppm when canopy covers pot will tone and shape growth. Paclobutrazol sprays of 10-30 ppm can also be used. Note: PGR rates vary widely by location, so always use caution when applying for the first time.

Flowering. Gaillardia is a long-day crop, so early crops may need lighting to bloom. Vernalized plugs can flower faster, so if speed is of the essence, look for vernalized plugs and keep night temperatures cool.

vegetative matters

sus orange red and the red to yellow balance) varies from one cultivar to the next. The only way to know exactly what you are getting is to go vegetative and get cuttings of a superior form. The seed types, even though there is some variability, are still the economical way to grow the crop, and sometimes the variability can be a good thing at the retail level. In general, gaillardia breaks up into three groups: doubles, singles and species or novelty (see figure 1, below).

Pure red, pure yellow and bi-color forms make up the double-flowered types. Seed doubles often have a percentage of seedlings that revert to single flowers, so the cutting produced types like the Torch series, from Ball FloraPlant, eliminate the off types and give you a uniform crop. However, the Lorenziana Mix from Sahin has a lot of color forms that are really

unique, so it depends on what you want to grow. Otherwise, among the doubles, there isn't a big difference between the growth habits or flowers of the different double cultivars. Still, these plants are true show-stoppers, so they will really add to late-spring and summer sales.

In singles there is the same color breakdown, roughly, with varying degrees of red petals with yellow tips dominating the selection of single forms. The interesting stuff is in the burgundy forms, and again color varies with your environment and temperatures. Check out 'Summer's Kiss' with paler apricot and gold colors.

The newest novelty is 'Fanfare' a single with yellow and red trumpet shaped petals; it is a totally different texture and look for gaillardia and a really strong performer from what

Figure 1. An overview of the commercially available gaillardia hybrids and species. There is a lot of overlap in what is sold with not much difference between many of the cultivars; however, there are some great double forms and novelties you should try. Tracking down the breeders of each cultivar is a little difficult so check with your local distributor/broker to find the different types.

Cultivar	Supplier	Seed or cutting	Scientific name	Single or Double	Color	Description
DOUBLES						
aurea pura	Sahin Seed Kieft Seed	Seed	<i>G. pulchella</i>	Double	Yellow	8-16 inches
'Lollipop Gold'	Sahin Seed	Seed	<i>G. pulchella</i>	Double	Yellow	8-16 inches
'Yellow Plume'	Kieft Seed	Seed	<i>G. pulchella</i>	Double	Yellow	8-16 inches
'Lorenziana Mix'	Sahin Seed	Seed	<i>G. pulchella</i>	Double	Red, Yellow, Bi-color	8-16 inches
'Lollipop Red'	Sahin Seed	Seed	<i>G. pulchella</i>	Double	Red	8-16 inches
'Red Plume'	Sahin Seed Kieft Seed	Seed	<i>G. pulchella</i>	Double	Red	16 inches
Sundance	Many	Seed & Cutting	<i>G. pulchella</i>	Double	Red, Yellow, Bi-color	8-16 inches
Torch Series	Ball FloraPlant	Cutting	<i>G. pulchella</i>	Double	'Flame' - red-yellow bicolor 'Gold' - deep yellow	Fully double, uniform color and flowering 12-19½ inches
SINGLES						
'Indian Yellow'	Many	Seed	<i>G. aristata</i>	Single	Yellow w/ Yellow eye	16-35½ inches
'Yellow Queen'	Many	Seed	<i>G. aristata</i>	Single	Yellow w/ Yellow eye	16-35½ inches
'Gold Goblin'	Sahin Seed Benary	Seed	<i>G. x grandiflora</i>	Single	Yellow Gold	12-23½ inches
The Sun	Many	Seed	<i>G. x grandiflora</i>	Single	Yellow w/ Yellow eye	12-19½ inches
Dazzler	Kieft Seed Proven Winners Green Leaf Perennials	Seed & Cutting	<i>G. x grandiflora</i>	Single	True dazzler has yellow flowers with maroon centers, but it is also sold as a red & yellow bicolor no different than most.	16-35½ inches
'Summer's Kiss'	Green Leaf Perennials	Seed	<i>G. x grandiflora</i>	Single	Paler orange tones, more yellow	12-19½ inches
Bijou	Green Leaf Perennials	Seed	<i>G. aristata</i>	Single	Orange red w/ yellow tip	Dwarf. 12 inches
Tokajer	Sahin Seed	Seed	<i>G. x grandiflora</i>	Single	Orange tones	12-19½ inches
'Baby Cole'	Green Leaf Perennials	Seed & cutting	<i>G. x grandiflora</i>	Single	Red w/ yellow tip	Dwarf. 8 inches
Bremen	Sahin Seed Kieft Seed	Seed	<i>G. x grandiflora</i>	Single	Red w/ yellow tip	12-19½ inches
<i>G. pulchella</i>	Sahin Seed Native plant sources	Seed	<i>G. x grandiflora</i>	Single	Red w/ yellow tip	Large growth habit, 16-35½ inches

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Cultivar	Supplier	Seed or cutting	Scientific name	Single or Double	Color	Description
Goblin (Same as Kobold)	Sahin Seed Kieft Seed Benary Proven Winners Green Leaf Perennials	Seed & Cutting	<i>G. x grandiflora</i>	Single	Red w/ yellow tip	12-19½ inches
Dwarf Goblin	Sahin Seed Kieft Seed	Seed	<i>G. x grandiflora</i>	Single	Red w/ yellow tip	12 inches
Monarch strain	Various	Seed	<i>G. pulchella</i>	Single	Red w/ yellow tip	Large growth habit, 23½-35½ inches
Torchlight	Benary	Seed	<i>G. x grandiflora</i>	Single	Red w/ yellow tip	12-19½ inches
'Red Goblin'	Sahin Seed	Seed	<i>G. x grandiflora</i>	Single	Reddish tones	12-19½ inches
Blood Red	Sahin Seed	Seed	<i>G. pulchella</i>	Single	Reddish tones	12-19½ inches
Burgundy	Sahin Seed Kieft Seed Proven Winners Green Leaf Perennials	Seed & Cutting	<i>G. x grandiflora</i>	Single	Burgundy	23½ inches
Single Mix	Benary	Seed	<i>G. x grandiflora</i>	Single	Red, Orange, Yellow	12-35½ inches
SPECIES AND NOVELTIES						
<i>G. aestivalis</i>	UGA Trial Gardens	Seed	<i>G. aestivalis</i>	Single	Yellow, White	8-23½ inches
<i>G. pinnatifida</i>	UGA Trial Gardens	Seed	<i>G. pinnatifida</i>	Single	Yellow, yellow orange-red	8-16 inches
'Fanfare'	Plant Haven	Cutting	<i>G. pulchella</i>	Single, novelty	Red petals yellow tipped	Unusual trumpet shaped petals flare from center disc. 12-19½ inches
<i>G. aestivalis</i> var. <i>winklerii</i>	UGA Trial Gardens	Seed	<i>G. aestivalis</i> var. <i>winklerii</i>	Single	Purple, red and bi-color forms	8-23½ inches



Gaillardia 'Fanfare' (Photo courtesy of PlantHaven)

Finding the Plants

Ball Floraplant
www.ballforaplant.com

Benary
www.benary.com

Green Leaf Perennials
www.green-leaf-ent.com

Kieft Seed
www.kieftseeds.com

Plant Haven
www.planthaven.com

Proven Winners
www.provenwinners.com

Sahin Seed
www.sahin.nl

I have heard. I'm looking forward to seeing it in the trials this spring. Until then, see what Paul Pilon had to say about it in the January issue of *GPN*.

Allan Armitage at the University of Georgia has been playing around with a couple of less common species: *G. aestivalis* with purple flowers and *G. pinnatifida* which has a different flower form, like a single daisy with missing petals. Both of these species look very promising as well. I have even seen a picture of *G. aestivalis* with white and purple bicolor flowers.

Either way, these plants are nearly bullet proof, or "butt hardy" if you prefer, and they have a long list of strengths no matter where you are growing in the United States. Drought tolerant, relatively disease

free, deer proof, salt tolerant, great cut flower potential, a U.S. native, evidence of nematode resistance and some interesting herbal health applications as well. The best part is that gaillardia fits into most crop routines without special needs or considerations and boosts late-spring into summer sales. GPN

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