

IMPORTANT ADVANTAGES OF SWIFT'S 50-PLUG PERENNIALS

VIRUS TESTING	Swift's plugs are started in screened houses and all vegetative varieties are tested for Tomato Spotted Wilt Virus, Impatiens Necrotic Spot Virus, Tobacco Mosaic Virus, and Cucumber Mosaic Virus. Dianthus are tested for additional viruses.
MATURITY	The most mature plug on the market (sown in June), which in combination with the cold treatment period creates a plug that is vigorous and ready to root in quickly. The older the plug and the larger its root system, the more effective the cold treatment process is in forcing the plant into bloom. Thrivers 50-plug soil volume is up to 100% larger than a "72" cell and 300% larger than a "128" cell.
VERNALIZATION (Cold Treatment)	The most thorough cold treatment program available. Thrivers 50's are held at 33° F for 8-12 weeks which enables most varieties to bloom the first growing season. (Many bloom in the pot.)
FINISH TIME	The large cell and specially designed growing media forms a quality root system that quickly fills out your container: 6-9 weeks for 4" or quarts and 7-11 weeks for gallons.
PICTURE LABELS	1 Full Color Picture Label is supplied for each 50-plug. The tag is John Henry's Ultra Stake and measures 6½" x 1¾".
VARIETIES	Nearly 800 varieties from seed and cuttings with nearly 50 new varieties added yearly.
ECONOMIC FREIGHT	Due to maturity, dormancy and overall toughness, Thrivers 50-plugs are able to ship UPS or FEDEX GROUND instead of more expensive air methods, even in cold weather. For orders over 100 trays, Fed-Ex's Palletized Freight is used for East Coast destinations and Grower Truck may also be used for Mid-West deliveries.
DEPENDABILITY	Consistently, year after year, Swift's ship over 99.5% of confirmed order items accurately and on time.
PROFITABILITY	Thrivers 50-plugs make your perennial program profitable. They reduce your labor costs by being quickly planted into 4" to 6" pots with unskilled workers. 50-plugs grow rapidly, finishing often in 6-8 weeks reducing your overhead costs, and with a unit cost in the 60¢ range, they leave plenty of room for your profit margins.

Thrivers 50-plugs are a dependable way to produce a high quality perennial crop.

Order in Summer or early Fall for best availability.

Call us for advice on scheduling or variety recommendations, or see our "Bloom Schedule" for 300 Predictable varieties and our 50 Plug "Slow, Medium, & Fast Growing Perennial Schedule" for all our nearly 800 varieties.

5 STEPS TO PRODUCE BLOOMING PERENNIALS

(Crop details for Swift's 288 plugs from seed)
Transplanted into 50 Plugs

STEP 1: PERENNIALS SOWN IN 288 TRAYS IN LATE MAY TO JULY, to be transplanted into 50 Plugs, or into your own plugs or pots.

288 PLUG SCHEDULE / CULTURAL SPECIFICS

WEEK 1: Sow seed – specific number per cell, depending on the variety. Place in chamber; usually at 70° (depending on the variety) with 95% humidity. Check for moisture daily and mist as necessary.

SLOW Growing Perennial Schedule

Purchase or transplant 288 plugs in **late July to early August** that were sown in late May

Aquilegia	Campanula Carpatica	Hibiscus
Armeria	Echinacea	Rudbeckia Goldsturm

MEDIUM Growing Perennial Schedule

Purchase or transplant 288 plugs in **late August** that were sown in early June

Centaurea Montana	Dianthus Deltoides	Gypsophila	Lavender
Coreopsis	Gaillardia	Heuchera	Penstemon
Delphinium	Geum Bradshaw	Iberis Sempervirens	Salvia

FAST Growing Perennial Schedule

Purchase or transplant 288 plugs in **September** that were sown in late June

Achillea	Dianthus Barbatus	Leucanthemum	Poppy
Arabis	Digitalis	Lupine	Rudbeckia (except Goldsturm)
Bellis English Daisy	Hollyhock	Myosotis	

Average Seeds Per Cell

<u>Variety</u>	<u>Seeds / Cell</u>	<u>Variety</u>	<u>Seeds / Cell</u>	<u>Variety</u>	<u>Seeds / Cell</u>
Achillea	3	Dianthus Amazon & Bouquet	1	Heuchera Palace Purple	6
Aquilegia	4	Dianthus Diadem	3	Heuchera Ruby Bells	3
Aquilegia F-1	1	Dianthus Barbatus & Deltoides	4	Hibiscus	1-2
Arabis	3	Digitalis	3	Hollyhock Chaters	4
Armeria Splendens	8	Echinacea Purpurea	4	Leucanthemum	2
Bellis	3	Gaillardia	3	Leucanthemum Snow Lady	1-2
Campanula Clips	8	Gypsophila	4	Lupine Russell	1-2
Campanula Pearl	4	Gypsophila Repens	8	Myosotis	3
Campanula Glomerata	6	Herb Basil	4	Penstemon Digitalis	4
Centaurea Montana	3	Herb Chives	24	(Husker Red & Mystica)	
Coreopsis	3	Herb Lavender Hidcote, Lady, Rosea	4	Poppy Iceland	6
Delphinium Magic Ftns.	3	Herb Lavender Munstead	6	Rudbeckia Fulgida Goldsturm	2
Delphinium Pacific Giants	3	Herbs (most)	8	Rudbeckia Hirta	4
Delphinium Summers	2	Heuchera Bressingham & Splendens	4	Salvia Nemorosa	4

- WEEK 2:** Seeded items removed from chamber and placed in the plug house at 70°. Feed 50-100 ppm 15-5-15, 2 times/week. Use preventative fungicide such as Clearys/Truban if necessary. Feed varies with time of year, 1:4 feed to water ratio.
- WEEK 3:** Feed 100 ppm 20-10-20 or 15-5-15, 2 times per week. Maintain pH 5.8-6.2, test weekly. Obtain good wet/dry cycles.
- WEEK 4:** Drench Clearys (8 oz.), Truban (4 oz.)/100 gallons as necessary.
- WEEK 5-6:** Feed varieties with nitrate based fertilizer (15-5-15). Reduce temperature to 65° to tone plants. Tone plugs using calcium-potassium nitrate fertilizers.
- WEEK 7-8:** Tone plugs using calcium-potassium nitrate fertilizers.

STEP 2: TRANSPLANT 288'S INTO 50 PLUGS, QUART POTS OR GALLONS. We transplant our 288's into 50 Plug trays. You can plant 1 plug per plug or quart. Some gallons may need 2-3, 288 plugs.

- WEEK 1:** Keep plants moist, shade sunlight sensitive varieties such as Campanula and Aquilegia.
- WEEK 2-3:** Once established, feed 150 ppm 20-10-20 on slow growing varieties, or 15-5-15 or 17-5-17 on the rest of your varieties 2 times weekly. Allow to dry moderately between watering. For disease sensitive crops, use Clearys/Truban or Medallion/Subdue 1-2 weeks after planting.
- WEEK 5-8:** As plugs grow to "proper" size, reduce fertilizer to 125 ppm, twice weekly. Size is controlled by nearly wilting on certain varieties such as Digitalis. Night temperatures should be kept at 60° until 8 weeks old.

STEP 3: GROW ON IN 50-PLUGS OR POTS, until each variety is mature, totally rooted, and fills the container.

WEEK 9-12: Drop temperature in 2°-3° increments until reaching 33° around November 15.

STEP 4: VERNALIZE (OVER WINTER) THE PLUGS OR POTS AT 32°-35°F FOR 8-12 WEEKS.

STEP 5: PLANT THE PLUGS IN 4" OR 1 QUART POTS, approximately 8 weeks before desired selling date or 9-12 weeks for 6" or gallon pots. Grow according to detailed 4½" quart pot scheduling for Spring sales.