The World of Annuals (Life Beyond Petunias)

Home Gardener’s School March 21, 2015
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Annuals- Plants that complete their life cycle from seed to flower within a single growing season. All roots, stems, and leaves die annually. Only the dormant seed bridges the gap between generations.

Propagation- Two main methods: (Take away is the price of each method)

1-Sexual-Seed, Most common method of propagation. Cost effective (Cheap), disease free (virus diseases are not transmitted by seed propagation), convenient means of storage. Seed can remain viable for extended periods of time (though germ rates can decrease significantly). Disadvantage can be extended time to maturity. (Fruit trees 8 years seed to fruit). Seed Dormancy can be a problem. - (Scarification [nick seed coat], Dry Storage, Stratification [moist storage], embryo culture.

2-Asexual-Cuttings- Plants have the ability to regenerate parts. Stem cuttings regenerate roots. Leaf cuttings regenerate roots and shoots. Expensive to reproduce. Clone resulting in exact replication of original plant. Fast and easy method to propagate a desired trait. No seed dormancy. Includes grafting. Factors that affect propagation are Humidity, Temperature, Light, and Rooting Media.

F1 Hybrids-(Seed) Lots of genetic stuff here. Basically the cross between two parents with desirable traits. Hybrids exhibit disease resistance, hybrid vigor, heat tolerance, uniformity, and enhanced colors. Prodigy are not true to the original. Thus you can not collect seed from hybrids.

All American Selections-. AAS was established in 1933 to evaluate new varieties grown from seed in trials all over North America. Over the years, home gardeners have benefited from AAS winners through varieties with greater disease resistance, earlier bloom, uniformity, and new and improved flower colors. AAS judges evaluate these new varieties based on uniform standards such as color, disease resistance, insect & weather stress, prolonged flowering, attractiveness of blossoms, uniformity, uniqueness, and fragrance. www.aaswinners.com.

Gardening Alert (What is going on with Impatiens?)

Downy Mildew Disease is a water mold (more closely related to an algae than to fungi). This particular strain only infects the common garden Impatiens (Impatiens walleriana), Double Impatiens, and Balsam.

Symptoms include a speckled or yellowish look to the plant which mirrors nutritional deficiencies. The leaves will start to curl downward. As the disease progresses the undersides of the leaf will be coated with a white growth which is the spore containing structures. The leaves will then drop leaving mostly stems.
The spores are very aggressive and spread rapidly. Cool moist conditions are perfect conditions for the spread of the disease. This disease is not new. The first truly devastating reports were located in the UK in 2003 (we can even go back to 1897 in the US). South Florida started to see it in 2011. The Northeast and Midwest got our share in the summer of 2012. Some feel it may have came up with the winds of Hurricane Irene during the fall of 2011.

The best Solution for Downy Mildew is not to plant Impatiens until breeders can produce some resistant varieties. Containers such as Hanging Baskets seem the last to be affected by the disease so if you wish to try some my suggestion is to plant high.

For those who “need” Impatiens they can be planted with applications of fungicides to prevent the disease (there is no cure once plants are infected). Professional landscapers with a proper pesticide applicators license can use restricted use chemicals to prevent the disease. Homeowners can use over the counter chemicals which are less harsh but are also less effective.

Alternatives include Angelonia, Begonias, Caladiums, Coleus, Colocasia, Fuchsia, Lobelia, New Guinea Impatiens, Sunpatiens (a more sun tolerant New Guinea), and Torenia. Accent plants include Ipomoea (Sweet Potato), Setcreasea (Purple Heart), and Tradescantia (Wandering Jew).

**Annuals the Big 2**

**Petunias; (including Calibrachoa or Mini Petunias)**

**Seeds:**
- **Grandiflora:** Large flowers (‘African Sunset’ AAS)
- **Multiflora:** Medium size flowers stronger blooms than Grandiflora
- **Milliflora:** Small Flowers (‘Picobella White’)
- **Surfinia Types** (F₁ Hybrids); **Waves**, Vigorous spreading types

**Cuttings:**
- **Hybrids:** Special breeding for colors and “cool” Crazytunias, ‘Star Jubilee, ‘Pulse’, ‘Kermit Purple’, Cascadia ‘Indian Summer’
- **Calibrachoa** (mini Petunia) ‘Superbells Lemon Slice’, ‘Minifamous Dble Purple’

**Ride the Petunia Wave------Now serving 61 flavors (since 1995 with just Purple)**

**Original Wave Series (7)**
- Blue, Lavender, Misty Lilac, Pink, Purple Imp, Purple Classic, and Rose

**Easy Wave (16)**
- Blue, Burgundy Star, Coral Reef, Mystic Pink, Neon Rose, Pink, Plum Vein, Red, Rosy Dawn, Salmon, Shell Pink, White, and Violet **New Velour Series:** **Berry, Burgundy, Red**

**Tidal Wave (4)**
- Cherry, Hot Pink, Purple, and Silver

**Shockwave (8)**
- Coconut, Coral Crush, Deep Purple, Denim, Pink Shades, Pink Vein, Red, , Purple, Rose Imp.

**Double Waves (8)**
- Blue Vein, Blue Velvet, Lavender, Misty Lilac, Pink, Purple, Rose, and White

**Plus Wave Mixes (18)**
Begonias:

**Fibrous Begonias** ‘BraveHeart Rose Bicolor’, ‘Doublet Rose’

**Rex Begonias** T-Rex ‘First Blush’

**Angel Wing** ‘Gryphon’, ‘Sinbad’

**Hiemalis or Reiger Begonias** ‘Vermillion Red’

**Tuberous Begonias** ‘Illumination Golden Picotee’, ‘Non Stop Series’

**Hybrids** (Specialized Fibrous) ‘Dragon Wing’, ‘Baby Wing’, ‘Big’, ‘Whopper’

**Boliviensis** ‘Santa Cruz Sunset’, ‘Encanto’, Plus many more

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**New Varieties for 2015** (Well mostly new)

- Agastache Arizona Series (seed, compact), ‘Sun’, ‘Sandstone’, ‘Sunset’
- Ageratum (seed) ‘Planet Blue’
- Bacopa ‘Snowstorm Snow Globe’, ‘Snowstorm Blue Bubbles’
- Bracteantha **Cottage Series**, Bronze, Rose, White and Yellow
- Calibrachoa ‘Candy Bouquet’, Superbells ‘Strawberry Punch’, Kabloom Yellow (seed)
- Canna ‘Cannova Series’
- Cleome ‘Pequena Rosalita’
- Coleus Trailing Types (Terra Nova) ‘Color Clouds Spicy’, ‘Hipsters Zooey’
- Cuphea ‘Vermillionaire’
- Euphorbia ‘Diamond Delight’, ‘Glitz’ (seed)
- Gaura ‘Sparkle White’ (AAS)
- Impatiens Sunpatiens hybrids **Compact, Spreading, Vigorous** (a more sun tolerant New Guinea)
- Impatiens (interspecific crosses) ‘Bounce’ and ‘Big Bounce’
- Lobularia (Alyssum from cuttings, on steroids) ‘Dark Knight’
- Petunias (yes we have more) ‘Autumn Mystery’, ‘Sanguna Picotee Punch’, Sumo Series
- Salvia ‘Saucy Red’, ‘Saucy Wine’ (sorry no photo)
- Salvia ‘Wendy’s Wish’, now ‘Ember’s Wish’ and ‘Love and Wishes’
- Scaevola Surdiva ‘Variegated Blue’
- Stachy’s ‘Bello Grigio’
- Strawberries (ABZ Varieties from seed) Varieties include, ‘Berri Basket’, ‘Toscana’, ‘Gasana’
- Verbena ‘Wicked Mad Magenta’

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**Tried and True**

- Agastache ‘Kudos Coral, and Mandarin’, ‘Summer Love’
- Amaranthus (Summer Poinsettia) ‘Tricolor’
- Angelonia ‘Serena Series’ (Seed), ‘Angelos’, ‘Sungelonia’ Series (Cuttings)
- Begonias Can I say it again? **You MUST have some Dragon Wing’s or Big’s**
- Bidens ‘Rapid Yellow’
- Caladium (Old standard for shade)
- Canna (tuber) ‘South Pacific Scarlet’ (AAS) (Seed), ‘Pretoria’ (Roots)
- Cassia Popcorn Plant
Coleus Cutting Types ‘Dipt in Wine’, ‘Pineapple Splash’, ‘Peter’s Wonder’
Seed Types ‘Kong Lime Sprite’, ‘Fairway Mix’ (shade)
Colocasia Elephant Ears (sun or shade), ‘Black Coral’, ‘Blue Hawaii’
Coreopsis ‘Lil Bang Enchanted Eve’
Dorotheanthus ‘Mezoo’ (Replacement for Vinca Vine)
Fuchsia (Old standard for shade) upright for shade or sun is ‘Gartenmeister’
Geraniums (Ivy) ‘Acapulco Cascade’
Geraniums (Zonal) ‘Master Idols Pink’, ‘Calliope Dark Red’
Gomphrena ‘Qis Orange’
Heliotrope ‘Nagano’
Ipomoea (Sweet Potato Vines)
Kale ‘Redbor’
Lantana Great as the Summer Workhorse. ‘Bandana Landscape Series’
Mandevilla ‘Red Emperor’
Marigolds (African and French)
Nepeta (Catmint) ‘Junior Walker’
Ornamental Millet (Pennisetum) ‘Jade Princess’
Pentas ‘Starcluster Rose’
Peppers (Ornamental);
Rudbeckia hirta ‘Denver Daisy’, ‘Tiger Eye Gold’
Salvia ‘Velocity Blue’, ‘Playing the Blues’ (aka Mystic Spires), ‘Indigo Spires’
Torenia (shade) Wishbone Plant
Vinca (Catharanthus), ‘Cora Violet’ (F₁ Hybrid), ‘Nirvana Mix’
Zinnia elegans ‘Zowie Yellow Flame’
Zinnia hybrids; ‘Zahara Double Fire’, Profusion Hybrids

Places to see Annuals

**Rutgers Gardens** 112 Ryders Lane  New Brunswick, NJ 08901  732-932-8451
http://rutgersgardens.rutgers.edu/

**Penn State Trials at Landisville PA**
Penn State Southeast Research and Extension Center
1446 Auction Road  Manheim, PA 17545
http://trialgardens.cas.psu.edu/

**Mohonk Mountain House** 1000 Mountain Rest Road New Paltz, NY 12561 845-255-1000
http://www.mohonk.com

**Longwood Gardens** 1001 Longwood Road Kennett Square, PA 19348 610-388-1000
http://www.longwoodgardens.org

**Chanticleer Garden** 786 Church Road Wayne, PA 19087 610-687-4163
http://www.chanticleergarden.org

“**Even More**” Combos (Do we have time?)
Examples of Annuals and Succulents in real life situations.