

Breeding Rebloom Diploid Daylilies in Colors Other Than Yellow and Gold[®]

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There are different scenarios to use in describing rebloom daylilies:

- 1) One-time repeaters—those that send up two flower stalks (scapes) in succession (usually 2–3 weeks apart) from one ramet usually after winter or a cold period.
- 2) Daylilies that send up one scape per mature ramet with rebloom coming later in the season from newly maturing ramets (mostly in evergreen daylilies not requiring a cold period).
- 3) Daylilies that produce as many as 3 or 4 flower scapes in succession from one ramet (most of these plants are dormant and require a cold period—'Stella de Oro', 'Happy Returns', 'Early And Often', and 'Rosy Returns' are examples). Sometimes this third type of rebloom is described as continuous bloom.

Rebloom amount and frequency in all of these types can be affected by the amount of sunlight, moisture content of the growing medium, levels of fertilization, and maturity of the clumps (frequent dividing enhances rebloom).

In the 1970s most of the existing cultivars that rebloomed were in yellow- and gold-colored flowers such as 'Bitsy' and 'Yellow Lollipop'. There were a few exceptions with one-time rebloomers such as 'Baby Darling' (purple), 'Sue Rothbauer' (pink), and 'Chipper Cherry' (red). In 1975 breeder Walter Jablonski introduced 'Stella de Oro', which continues to be one of the most reblooming daylilies registered by the American Hemerocallis Society.

The author initiated a rebloom-breeding program in the early 1970s to try to seek continuous-blooming daylilies in colors other than yellow and gold. My first "one-time rebloomer" produced (in a color other than yellow and gold) was 'Pardon Me'. Its maternal parent, 'Little Grapette', didn't rebloom in northern zones but had a genetic background of rebloom parents. It was crossed with a seedling from 'Golden Chimes' (some rebloom) and 'Perennial Pleasure' (also some rebloom in its background). Only one seedling out of about 50 plants rebloomed. It was named and introduced as 'Pardon Me'. The cross was repeated and yielded about 75 seedlings, and again, only one rebloomed. It was named and introduced as 'Punk'. It should be pointed out that in the 1970s hundreds of other crosses were made toward this objective of rebloom in colors other than yellow and orange, and in the end no rebloomers were produced.

'Stella de Oro' was introduced into the breeding program in 1976. Over a period of several years about 8000 seedlings were grown from many different cultivar crosses with 'Stella de Oro'. One seedling from a cross with 'Susie Wong' was selected and named 'Happy Returns' in 1984. 'Happy Returns' became an important tool for breeding colors other than yellow and orange because of its light yellow color without the pervasive deep gold carotene base color. At this time enough test crosses had been made to persuade the author that certain forms of rebloom appeared to be recessive genes.

Over the next few years several crosses were made to explore rebloom as recessive gene(s) occurring on more than one or more chromosomes. A break in color came from a complex cross. 'Pardon Me' was crossed with 'Happy Returns' and produced a non-reblooming red. That red was crossed with another seedling out of 'Sugar Cookie' by 'Happy Returns', which again produced a non-reblooming brighter red color. This complex seedling was then crossed with another complex reblooming seedling out of two rebloomers 'Brocaded Gown' × 'Happy Returns' (later named 'Fragrant Treasure'). In the final cross a high percentage of rebloom daylilies occurred in various pink shades. The most reblooming plant was selected and named 'Rosy Returns'.

'Rosy Returns' and other rebloom selections have now been crossed extensively. By combining all three types of rebloom daylilies with near-continuous-blooming plants (especially those that were not yellow or gold), it has been possible to produce many rebloom daylily seedlings in most of the common colors. Efforts are now being made by using colchicine to convert many of these selections to tetraploids and to breed tetraploid rebloomers.