NEW VARIETIES OF *LIMONIUM* SPP. OBTAINED BY THE EXPERIMENTAL INSTITUTE FOR FLORICULTURE


*) Experimental Institute for Floriculture, Via dei Fiori 8, 51012 Pescia (PT) Italy
bugia58@virgilio.it
**) Experimental Institute for Floriculture, Sanremo (IM) Italy
genetica@istflori.it

*Limonium* spp., breeding, interspecific crosses

The genus *Limonium* includes about 300 species, cultivated for cut stem production (fresh and dried flowers). *Limonium* is an interesting ornamental plant because it can be easily cultivated in mediterranean climates, in particular in the South of Italy where the environmental conditions are hard for other ornamentals.

A breeding activity on *Limonium* was started in 1998 at the Experimental Institute for Floriculture, Dept. of Genetics, Sanremo, and Dept. of Pescia. More than a hundred botanical species and commercial varieties were rescued and cultivated in greenhouses, in open air and *in vitro*.

The fertile and the most interesting genotypes were utilized in an incomplete diallelic cross design since June 1998. The first inter- and intra-specific hybrids were obtained in 1999. Also progenies deriving from open-pollinations and self-pollinations were obtained and evaluated. They derive from the following botanical species: *L. latifolium*, *L. gmelinii*, *L. caspia*, *L. otolepis*, *L. bellidifolium*, *L. serotinum* and *L. tataricum*. A first group of 12 selected genotypes were cultivated in open air and in greenhouses in Liguria and in Toscana since 2001. These new varieties have been already evaluated by private growers and breeding companies for the development of new cultivars.

A second group of about 20 selected genotypes, deriving from *L. sinensis*, *L. tetragonum*, *L. aureum*, *L. sinuatum*, *L. bonduelli* and also the above described species, have been cultivated in Toscana and in Sicilia and have been introduced to growers and private breeders since 2003. The most interesting among these new varieties will be described in this work.

All of these selected genotypes are suitable for cultivation in the mediterranean environment, particularly in poor soils and marginal farms. They require low-energy for cultivation, minimum tillage and low input of fertilisers and pesticides. These characteristics derive from the fact that at least one of the parentals in each constitution is a wild botanical species, whose seeds were collected along the coasts of Sicilia, Sardegna, South Italy, Spain etc., or were bought by private companies from all over the world. The improvement of the aesthetical and commercial characteristics of these genotypes through interspecific crosses and selection has led to the release of these new varieties.