

BREEDING at its BEST

THE COMPANY

Danziger – "Dan" Flower Farm is celebrating its 60th anniversary. The company develops, produces and markets over 100 million cuttings and plants of 100 different bedding crops, cut flowers and perennials, comprised of over 500 diverse varieties each year. Danziger has reached the aim to be amongst the three leading companies for each of the crops they breed, while following the core values as they appear in the Vision statement. The company believes in innovativeness and demonstrates extraordinary breeding over and over again with interesting bedding plant varieties.



OUR CORE VALUES

- Innovation & Daringness
- Excellence & Expertise
- Constant Learning & Ongoing Innovation
- Fair Business & Commitment to Customers
- Commitment to Employees
- Family Atmosphere & Teamwork

OUR VISION

Danziger – "Dan" Flower Farm specializes in research and development of new varieties and cultivars, intends to preserve and promote its status as a worldwide leader in breeding, marketing and production of propagating material ornamental plants and flowers. We will reach this goal with advanced Israeli and global research, innovativeness, excellence, diligence, daringness and determination while being personally committed to our customers and employees, conducting fair dealings and having high respect for nature. We the company's employees are fully devoted to our work and creations at all times.

Danziger sets high standards in the bedding plants industry. The company is not only innovative with the bedding plant products they offer but also with their marketing approach. They support their bedding plant varieties with high standard-promoting campaigns, and an excellent distribution system through licensed brokers and leading companies around the world.

Danziger believes in one stop shopping, service without compromise and has high regard for their customers; loyalty to customers is Danziger's most important value. The company functions in a family atmosphere, which is well expressed also in their relationships built with their customers.

The list of products in which Danziger is considered as one of the leading in the bedding plants industry is a very long one, consisting of New Guinea Impatiens, Double Impatiens, Petunia, Calibrachoa, x Petchoa, Bacopa, Torenia, Bidens, Angelonia, Nemesia, Osteospermum, Argyranthemum, Scaevola, Brachycome, Diascia, Lobelia, Salvia, Portulaca and more.

As for finished products, Danziger aims to bring the widest range of colors, shapes and sizes in each of the cultivars it is breeding, using conventional and advanced breeding techniques and constantly investing in research.

It is Danziger's belief that a good variety begins with a good grower, and it invests wide resources in technical assistance and professional publications for the benefit of its customers.

Danziger has been a pioneer in its marketing and advertising approach, in addition to being committed to the growers and to the production process as a way of supporting and making sure the varieties will succeed.

Danziger believes it is important to be well connected with the wholesaler; retailer and consumer levels, while understanding there are different needs and tastes.

Danziger realizes that a good variety requires strong marketing support, and therefore invests huge resources in supporting its varieties by investing in promotion campaigns as well as in exhibitions, marketing events and more.

The following are just a sampling of Danziger Flower Farm's innovative breeding program:

Petunia Sunshine Ray™ blooms in a profusion of large bright yellow flowers. Ray varieties are well established in the marketplace and are known to growers for incredible garden performance, dependable plant vigor, superior heat tolerance and improved disease resistance.



Petunia Cascadias™ Indian Summer is semi trailing variety. Flowers bloom in a profusion of three different colors, making it seem that the plant has a mix of three flower colors. The newest to flower are yellow, and as they age, they turn orange-pink.



Lobularia Purple Stream™ is the newest in the popular Stream series, which features floriferous, ball-shaped plants. These fast growers produce a wonderful early scent of spring. Heat tolerant, they grow all through the summer. Stream varieties are ideal as fillers in mixed containers, hanging baskets or window boxes.



Cleome Clio™ features excellent branching and a strong, upright structure, combined with lustrous dark foliage and lovely purple-pink flowers. Long, continuous flowering and superior garden performance add to the appeal.



Salvia Sallyrosa™ April Night blooms earlier and requires no vernalization for flowering. Better branching gives it a fuller appearance, yet it retains an appealing compact shape and structure.



Coreopsis Solanna™ Golden Sphere bursts with big fully double blooms that are early to flower. Plants grow into attractive, compact mounds.



Sun Harmony Impatiens

The Sun Harmony varieties are highly branched, with beautiful large-rounded flowers and excellent garden performance in full sunlight or partial shade. Sun Harmony varieties are the obvious choice for gardening, containers and patio planting.



TECHNOLOGY at its BEST



Danziger Innovations Ltd. is an agricultural biotechnology startup company which was established in 2008 by Danziger “Dan” Flower Farm, and specializes in the development of the MemoGene™ plant breeding technology. The technology has been developed in collaboration with Professor Vainstein from the Institute of Plant Sciences and Genetics of the Hebrew University of Jerusalem’s Faculty of Agriculture.

MemoGene™ is a groundbreaking viral-based technology for precise plant genomic modifications that can be applied to all plants without using common genetic engineering. The method is based on highly efficient viral vectors for DNA delivery, and on targeted endonucleases for nuclear and plastid genome manipulations.

Current breeding methods include traditional methods of plant cross breeding, mutagenesis and genetic engineering. Today’s classical and modern breeding techniques (i.e., plant cross breeding, mutagenesis and genetic engineering) are limited by the fact that they are labor-intensive, expensive, time-consuming and highly unpredictable.

The MemoGene™ Technology The MemoGene™ Solution bypasses current biotechnological barriers for precise genome editing and offers two main applications: DNA deletion and DNA insertion/substitution.



Application 1: DNA Deletion

Viral-based targeted deletion of DNA is an extremely useful tool for the development and breeding of new plant varieties, especially in light of general genomic advances.

a) Targeted ID-ing:

Accomplished via the deletion of readily identifiable segments of non-coding DNA (nuclear or plastid), a plant can be easily “tagged” for patentability. There is currently no efficient way of avoiding

infringement or of protecting parent lines. The ability to “mark” plant varieties is expected to be of enormous benefit to breeders by reducing losses in royalty and income, as well as the need for legal processes and their associated high cost. The ID-ing will not change the plant’s phenotypic traits; it will be unique; and the outcome will allow the introduction of tagged plants to new foreign markets as well as technology transfer within the industry.

b) Targeted Mutagenesis:

Expression or suppression of specific plant traits will be achieved through deletion or alteration of gene sequences (nuclear or plastid) thereby affecting the activity, creating new commercially desirable “tailor-made” varieties.

Application 2: DNA Insertion/Substitution

The new viral-based method of genome modification will be used to generate novel characteristics in plants through site-specific substitution/insertion of relevant DNA sequences in nuclear and plastid genomes. While this may involve a longer time to market than mutagenesis, the long-term commercial possibilities here are enormous.



Key advantages of MemoGene™ over the common genetic engineering methods are: a generic process which requires only small modifications for use in different plants; tissue culture steps can be avoided; possibility of modifying traits controlled by DNA that is present in the nucleus and cell plastids (mitochondria and chloroplasts); applicable even in recalcitrant plants that have proven resistant to genetic engineering.

The chain of procedures carried out in our technology is aimed to produce material free of diseases and viruses. Varieties chosen for commercial purposes undergo a series of tests for a range of viruses typical for that certain crop. Only after such procedure, the mother stock is built from the material, or is supplied as mother stock material to our certified licensees to self-propagate under a signed royalty agreement.

All varieties are maintained in tissue culture at the company’s laboratory in order to preserve them free of diseases and viruses. The lab provides the production department also diagnostic services for wide range of diseases and viruses. Furthermore, the lab produces mother plant material and supplies it as per requests/orders received from our customers worldwide.