

Breeding and Product Development by Ex-Plant ApS®

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INTRODUCTION

Ex-Plant ApS was founded on 1 July 1995 by Leif Markvart and Carsten Leth and is located in Stige in the northern part of Odense, Denmark. Leif Markvart has his Master Degree in Horticulture and is operating the Leif Markvart nursery which produces young plants. Carsten Leth is trained as a horticultural technician and functions today as the manager of Ex-Plant ApS. At the same time, he is responsible for all breeding and seed production activities.

The creation of Ex-Plant ApS was based on the *Exacum* gene bank and seed production techniques originally developed by Erik Rosendal in Assens, Denmark. Erik Rosendal was a leading person for 15 years in the breeding and seed production of *E. affine*. The position which *Exacum* holds today in the Danish assortment of potted plants can, to a large extent, be attributed to Erik Rosendal's perseverance with regard to the culture of this plant. A portion of the *Exacum* gene bank which Ex-Plant has at its disposal today consists of species which Erik Rosendal himself collected during his many trips around the world.

THE COMPANY'S MISSION

Based on the goal of the breeding and product development, Ex-Plant will aim at developing attractive plants for both the Danish and international markets. Ex-Plant will have an intimate knowledge of the cultivation of its products so we always are available to provide technical support for all of our products.

BREEDING

Ex-Plant ApS carries out comprehensive breeding and product development with *Exacum*, and is currently the world's leading supplier of *Exacum* cultivars. *Exacum* belongs to Gentianaceae and encompasses 68 species, most of which are native to the islands of Socotra, Sri Lanka, and Madagascar in the Indian Ocean. The cultivars that are used in commercial production today all belong to *E. affine* native to Socotra.

In extra support of the breeding work being performed at Ex-Plant, a close relationship has been established with the Department of Horticulture at the Danish Institute of Agricultural Sciences at Årsløv. One of the advantages in this cooperation is the good facilities at the department for advanced breeding techniques. This professional relationship is goal-oriented, and has existed since the start of the company.

The breeding of *Exacum* by Ex-Plant ApS has since 1995 resulted in 6 new varieties, which have been introduced during the season 1999/2000. From 1995 to 1999 sale and promotion of *Exacum* was done by L. Dæhnfeldt, but since 1 July 1999 Ex-Plant has assumed those activities. More direct contact between the breeder and the producers ensures good dialog which is very important for the continuous breeding work.

PRODUCT DEVELOPMENT

As part of Ex-Plant ApS's efforts to expand its product line, advanced genotypes are constantly developed and tested. A minimum of two new genera are tested each year. In order to make sure this work is done in the most professional way, Ex-Plant has just employed a horticulturist who is specialised in breeding and product development activities.

PRODUCTION

Ex-Plant's facilities, which include greenhouses, working facilities, germination room, and administration building, are part of Leif Markvart's nursery for young plants. The production of *Exacum* seed takes place during the summer between June and August. For additional security of seed supply, we always attempt to produce enough seed for 2 years. The stock plants used for seed production are selected clones that are well suited for seed production. Cleaning, drying, and preservation of the seeds take place in cooperation with a professional seed technologist.

GERMINATION TEST

In order to follow the germination percentage of the different batches of seeds, every second month, a germination test is performed on all seed batches. The germination test takes place in growth substrate under constant environmental conditions. The actual vigour and germination (i.e., growth rate and uniformity) of a seed batch is specified on every package. This information is very valuable to producers, placing them in a position to take the necessary precautions in production.

You will find more information about the Company Ex-Plant ApS at www.ex-plant.com