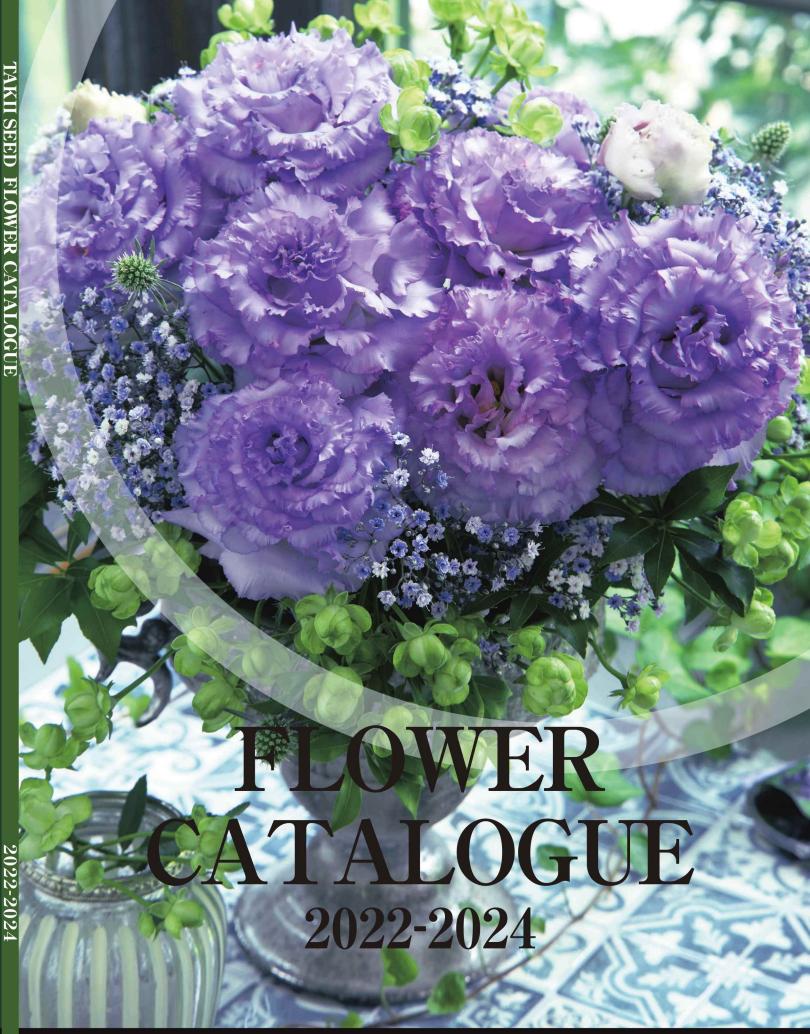
TAKII & CO., LTD.

180 Umekoji-Inokuma, Shimogyo-ku Kyoto, 600-8686 CPO Box 7, Japan Tel. 81-(0)75-365-0123 Fax. 81-(0)75-365-0110 www.takiiseed.com











All-America Selections and Fleuroselect Gold Medal Winners

Takii is a member of both All-America Selections (AAS) and Fleuroselect organizations. It is our great pleasure to present a number of prestigious varieties awarded by AAS and Fleuroselect in this catalogue. Varieties with logos of AAS and/or Fleuroselect are indicators for our recommendation of items for your variety selection.

AS

All-America Selections National Winner

Awarded only to new varieties that perform best in garden performance trials over all of North America



All-America Selections Regional Winner

Awarded only to new varieties that performed particularly well in certain regions in North America



Fleuroselect Gold Medal

Rewards true breeding innovations evaluated through trials of new ornamental varieties at 18 private trial grounds across Europe



Fleuroselect Approved Novelty

New varieties that have been recognized to be sufficiently new and different versus existing cultivars and have passed the rigorous requirement for uniformity



Award selected during Flower Trials in the Netherlands and Germany by 30 expert judges from across the industry, choose the winner with the 'wow' effect at point of sale

AS Dianthus, F1 Carpet Snow Fire

AS Zinnia, F1 Sun Red

AS Zinnia, F1 Sun Gold

1982

Dianthus, F1 Telstar Mix

1989

Dianthus, F1 Telstar Crimson

AS Dianthus, F1 Telstar Picotee

1990

AS Achillea, F2 Summer Pastels

Celosia, Castle Pink

1992

AS Canna, Tropical Rose

AS Salvia, Hummingbird Lady in Red

1999

AS Osteospermum, Passion Mix

Viola, F1 Floral Power Orange Red Wing

2007

Petunia, F1 Opera Supreme Pink Morn

2011

AS Brassica, F1 Glamour Red

2011-2012

AS Salvia, Summer Jewel Red

2012

AS Salvia, Summer Jewel Pink

Alcea, Spring Celebrities Crimson

2013

AS Canna, F1 South Pacific Scarlet

2015

Salvia, Summer Jewel White

APPROVED Serenity Pink

Canna, F1 Cannova Bronze Scarlet

2016

Salvia, Summer Jewel Lavender

2017

AS Petunia, F1 Evening Scentsation

AS Capsicum, Onyx Red

AS Canna, F1 South Pacific Orange

2019

Begonia, F1 Fiona Red

2020

APPROVED SE Zinnia, F1 Preciosa Orange

APPROVED CONTROL POLICE POLICE

2022

Zinnia.Belize Double Scarlet



13
14
14
15-16
16
17-19
20
20
21-23
24
51
25
25
26
28
27-28
26
26
51
29
30
31-32

M	Matthiola incana (Stock)	32-33
	Melampodium paludosum	34
O	Osteospermum ecklonis	35
P	Pansy (Viola wittrockiana)	35-36
	Petunia hybrida	37-39
	Pharbitis purpurea (Ipomoea)	40
S	Salvia coccinea	40-41
	Salvia splendens	41
	Senecio cruentus (Cineraria)	42
	Stipa tenuissima	51
V	Verbena x hybrida	42
	Viola cornuta	43-46
Z	Zinnia elegans	49-50
	Zinnia hybrida	47-48
	The state of the s	

A Antirrhinum majus (Snapdragon) 53-54 B Brassica oleracea (Flowering Kale) 55-58 C Calendula officinalis 58 59-62 Callistephus chinensis (Aster) 63 Carthamus tinctorius Celosia cristata 63 Consolida spp. (Larkspur) 63 D Delphinium elatum 64 Dianthus hybrida 65 E Eryngium leavenworthii 65 G Gomphrena globosa 65 H Helianthus annuus (Sunflower) 66-70 L Limonium sinuatum (Statice) 69

71-78

79-80 80

Lisianthus (Eustoma grandiflorum)

M Matthiola incana (Stock)

Z Zinnia elegans

	Gerbera, F1 Royal Semi-double series
10	Gerbera, F1 Royal series
1	Lavandula, Blue River
12	Linaria, Fantasy Spring Mix
	Matthiola, Cinderella Antique
7	Matthiola, Cinderella Appleblossom
	Matthiola, Cinderella Yellow
	Pansy, F1 Nature Yellow
-	Petunia, F1 Trilogy Salmon Morn
	Salvia, Sangria
- 1	Tanacetum, Carlos and Santana Yellow
	Viola, F1 Floral Power Apricot Lip
	Viola, F1 Floral Power Deep Blue Blotch
	Viola, F1 Four Seasons series
	Viola, F1 Gem Lavender Apricot
	Viola, F1 Gem Lilac Antique
	Viola, F1 Gem Sapphire
	Viola, F1 Gem White
	Zinnia, Crystal series
	Carex, Bronze Curls
	Isolepis, Fibre Optics
	Juncus, Hedgehog Grass
	Juncus, Spiralis
	Brassica, Sunrise
	Brassica, Sunset
	Dianthus, F1 Carousel
	Echinacea, Bravado
_	Gomphocarpus, Hairy Balls
-	Helianthus, F1 Tiffany
-	Lisianthus, F1 Arena II Light Pink
	Lisianthus, F1 Corelli II Delft Blue
_	Lisianthus, F1 Corelli III Blue
-	Lisianthus, F1 Croma III Green
-	Lisianthus, F1 Croma III Pink Picotee
-	Lisianthus, F1 Vulcan II Blue Picotee
-	Matthiola, Glory Cherry
-	Tanacetum, Virgo

NEW FLOWERS LINE UP

Antirrhinum (Pot)







F1 Statement Rose









Brassica

F1 Crystal Deep Red

F1 Statement Scarlet



F1 Crystal Pink







F1 Crystal Red F1 Crystal Snow







F1 Opera Supreme Lemon





Page 31 >>>

Canna



Eustoma (Pot)





F1 Julietta White

Petunia

F1 Opera Supreme Rose

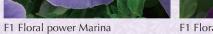
F1 Trilogy Silver Blotch

F1 Trilogy Pink Lips

Page 17>>>

Viola Page 43-46 >>>







F1 Floral power Purple Pearls



F1 Floral power Plum Antique



F1 Floral power Raspberry



Belize Cherry

Zinnia



Belize Orange





Page 47-48 >>>

Belize White



F1 Floral power Yellow Beacon



F1 Floral power Deep Blue



F1 Floral power Deep Orange







F1 Gem White Imp.



Belize Double Orange NOVELTY NOVELTY







Belize Double White



Belize Double Yellow



Belize Double Formula Mixture

Antirrhinum

Page 53>>>





F1 Legend White Imp.

F1 Legend Yellow Imp.

Brassica

Page 55>>>









F1 Crane Ruffle Bicolor

F1 Crane Ruffle Red

F1 Crane Ruffle Rose

F1 Crane Ruffle White



Callistephus

Page 59,61 >>>





Nina Plus Purple





Nina Plus Scarlet

Nina Plus White







Optimo Deep Purple

Optimo Red

Optimo α Light Blue

Eustoma (Cut)

Page 71-76,78 >>>







F1 Corelli I White

F1 Falda III White







F1 Croma II Purple

F1 Corelli I Pink



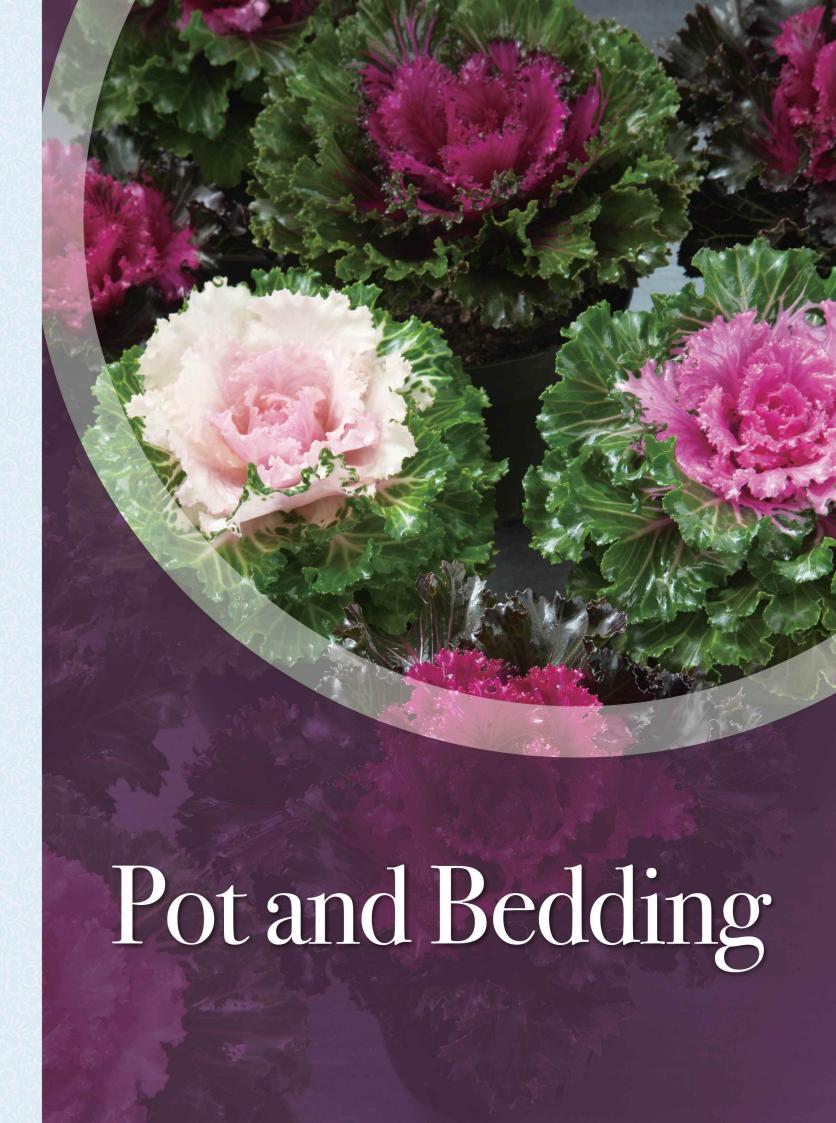




F1 Corelli III Lavender

F1 Corelli III Peach

F1 Corelli Sugoi III Yellow



Achillea

F2 Flowerburst_{TM} Red Shades

Achillea millefolium 17-20°C/63-68°F 3-4 days



- An energizing blend of mainly red, rose and violet shades
- An attractive garden plant. Since it is a hardy perennial, it survives a cold winter and blooms every year unless exposed to extreme hot and humid conditions in summer



F2 Summer_{TM} series

Achillea millefolium □ 17-20°C/63-68°F □ 3-4 days



- •Very hardy perennial for the garden, mass plantings in landscapes, pot use and as a cut
- The Summer series loves sunny conditions and will bloom in Summer - Autumn in the first year, earlier in the second year
- Remove old flowers to encourage new blooms





Arizona_{IM} series

Agastache aurantiaca 20-22°C/ 68-72°F 5-7 days



- Very compact and floriferous, and performs well in containers and landscape
- Foliage has pleasant lemon / mint scent
- Fast crop from spring sowing. Easy maintenance
- Will bloom continuously throughout the season without deadheading
- Maintain pH level at 6.4-7.5 and EC at 1.5-2.0. Agastache will exhibit chlorosis if media pH is below 6.2
- Suitable for dry and sunny location. Agastache will not tolerate wet conditions









Germination Temperature Days to Emergence

Spring Celebrities_{TM} series

Alcea rosea □ 15-20°C/59-68°F □ 8-10 days



- Double- to semi-double dwarf Hollyhock which has excellent basal branching
- It flowers in the first year and keeps flowering for three months if conditions are favorable
- Carmine Rose and White may have around 15% single flowers. Other varieties may have a small percentage of single flowers



Germination Temperature Days to Emergence



Antirrhinum (Snapdragon)

F1 Palette_{TM} series

Antirrhinum majus Light required 15-20°C/59-68°F 10-12 days



•Vigorous and uniform, Palette blooms early and continues to bloom throughout the season on well-branched plants

Dwarf plant for pack, pot, mixed container and garden use



Orange and White

Rose Eye

Palette will paint your garden w





Purple and White

















Great compact plant shape with good basal branching

• It has thicker leaves and large flower compared to other varieties



F1 Statement_{IM} series

Antirrhinum majus

□ 18-22°C/ 64-72°F □ 7-12 days

F1 Fiona_{TM} series

Begonia semperflorens Light required 22-24°C/72-75°F 15-20 days



- •White and Pink are semi-double type Begonia semperflorens with excellent uniformity
- Early flowering habit is same as standard single varieties. Plant habits are also comparable to them









FLEUROSELECT GOLD









Fringed leaved type

- The edges of all the leaves are finely ruffled
- Fringed-leaved types have better colour development under warm conditions compared to other types



F1 Crystal_{IM} series

Brassica oleracea



- Our new shiny leaf series
- Pink, Deep Red, and Red are almost same in colouring speed
- Snow is little slow in colouring speed compared to 3 varieties above





Deep Red





F1 Glamour Red

Brassica oleracea 20-25°C/68-77°F 04-6 days



● First F1 shiny leave dwarf type brassica introduced in the world





F1 Kamome_{tm} series

Brassica oleracea



Brassica (Flowering Kale)

- Kamome can withstand frosts and freezes
- One of the few items that can be enjoyed in the winter garden

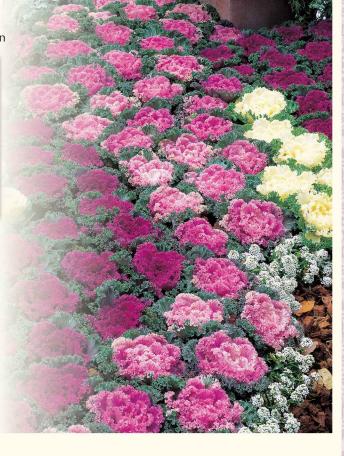




FHB571







Round leaved type

• Compact, dwarf plants with uniform, round-shaped, solid heads and slightly waved leaves

F1 Pigeon_{TM} series

Brassica oleracea 20-25°C/68-77°F 4-5 days



Pigeon series has a robust habit and is suitable for landscape use

FHB511









Red

Brassica (Flowering Kale)

F1 Song Bird_{IM} series



- Song Bird series has excellent doubleness with a compact habit
- Available in Pink, Red, and White, 3 colours that bring out the beauty in winter gardens and mixed containers









Feather leaved type

. These varieties are all deeply serrated and have a larger head than other types

F1 Peacock_{TM} series

Brassica oleracea



The plants can withstand moderate frosts and freezes and work well in wet conditions as their open feathery leaves are less likely to trap and hold water than fringed- and round-leaved types





FHB621

White FHB622

Variety Comparison among Bedding types

Takii's Brassica: • Unique in the garden landscape and combination planters • Heads begin to show colour on the central leaves when the air temperature regularly drops below 13-15°C/ 55-60°F

Variety	Diameter of Flower Head	Larger A B
Crystal Deep Red	С	Smaller C
Crystal Pink	С	
Crystal Red	С	
Crystal Snow	С	
Glamour Red	В	
Kamome Pink	В	
Kamome Red	В	
Kamome White	В	
Pigeon Purple	В	
Pigeon Red	В	
Pigeon Victoria	В	
Pigeon White	В	
Song Bird Pink	С	
Song Bird Red	С	
Song Bird White	С	
Peacock Red	А	
Peacock White	Α	

Zen_{TM} series

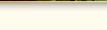
Calendula officinalis

Dark required 21-24°C/70-75°F 8-10 days



- Uniquely compact, bushy plants with double flowers
- Suitable for both pot and bedding use
- Flower size: 7-8 cm/3 inches







Orange

F1 Takion_{TM} series

Gold

FKN321

Campanula persicifolia

15-20°C/59-68°F 15-18 days



- Takion has a very good basal branching habit with 6-8 sturdy stems of showy, long-lasting bell-shaped flowers in
- Very hardy and survives at least to -10°C/ 14°F
- Makes excellent garden perennial as well as a beautiful pot





FTU521

White

Vernalisation Tips for Takion

- * After plants attain mature vegetative growth, they require
- * The plants require about one month of temperatures below They endure light frost
- * After vernalisation, heating at 10-15°C/50-60°F accelerates the flowering by approximately one month
- * The advantage of Takion is that it grows faster and comes into flower in a shorter period of time Sow the seed in the autumn, it will flower in the spring





Pot and Bedding





Tropical_{TM} series

Canna generalis

Temp. fluctuation is preferable 20-30°C/ 68-86°F 10-15 days



- Canna Tropical series is a seed product and is extra dwarf
- Production period is fast and plants are characterized by readily producing offsets, making full finished pots with tremendous consumer appeal
- Tropical White produces flowers with or without pink spots, with the flowers on individual plants exhibiting the same degree of spotting
- Prefers warm and humid conditions over 25°C/77°F



It is possible to have a water garden with canna Tropical



Bronze Scarlet





Rose FCA122







Yellow FCA126

F1 South Pacific_{TM} series

Canna generalis © 20-30°C/ 68-86°F 0 10-15 days



- The first F1 Canna series from seed
- Better uniformity at its early stage of germination compared with our existing variety, Tropical series
- Good basal branching
- Scarlet and Orange earned AAS awards
- Being from seed, the South Pacific series is not prone to diseases often transmitted in rhizome propagation
- The vibrant colours of the large flowers creates a dramatic and tropical feel
- •Use this striking beauty in planters, mixed containers, gardens, landscapes and in shallow areas of water features











Pot and Bedding

F1 Cannova series

Canna generalis 20-30°C/68-86°F 10-15 days



- Cannova can be grown at lower temperature
- High degree of uniformity and high percentage of saleable plants
- Early flowering, can also be grown in smaller pot size
- Good branching habit and excellent leaf quality
- An attractive and broad range of bright colours on green or bronze leaved plants



Bronze Orange FCAA33







Bronze Scarlet FCAA35

Lemon FCAA15

Mango FCAA10







Rose FCAA05

Scarlet FCAA37

FCAA02



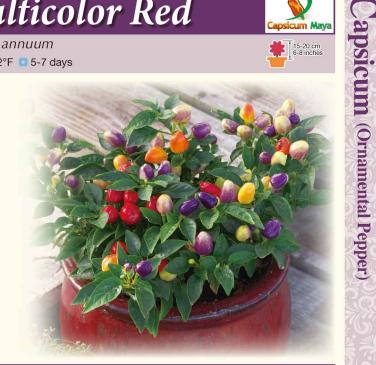
Cubana_{IM} Multicolor Red

Capsicum annuum 20-22°C/68-72°F 5-7 days



- Excellent large fruit on top of vigorous plant
- Oval type of fruit with five colours can be used in various combinations in mixed containers and pots





Onyx_{TM} Red

Capsicum annuum



- ■2017 AAS award winner
- •An unprecedented compact, black-leaved capsicum
- Compact, well-branched plant habit with eye catching dark black foliage
- Ball-shaped fruit matures from black to red





Onyx Red's young fruit is glossy black. The combination of black fruit and black foliage makes a very stylish impression.



Celosia

Pot and Bedding

Armorm series

Celosia cristata

Dark reaquired 20-25°C/68-77°F 8-10 days



- Attractive large flower heads in bright colours on robust plants with lush foliage
- Ideal item for hot summer gardens as well as pot use

Purple FKT245

Yellow is relatively compact in the series



FKT242

Orange









FKT241

Yellow FKT243

Castle_{IM} series

Celosia plumosa

Dark required 20-25°C/68-77°F 8-10 days













Scarlet

FKT268

- Castle is semi-dwarf in height, vigorous and has a self-branching habit
- The long-lasting flowers easily withstand summer heat and drought
- Excellent for landscaping, containers and gardens





Snowland_{IM}

Chrysanthemum paludosum □ 15-20°C/ 59-68°F □ 5-10 days



- Snowland has profuse clear white daisy-like flowers with yellow disks
- This variety has a uniform plant habit with large flowers that are bigger than other paludosum type Chrysanthemums
- Under warm temperatures and long-day conditions they produce many flowers, under cool temperatures and short-day conditions, they produce many branches



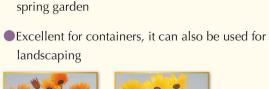
Germination Temperature Days to Emergence

Spring Flashm series

Dimorphotheca sinuata □ 15-20°C/ 59-68°F □ 8-10 days











Orange

Yellow

Spring Flash provides bright colour for the early

Charity_{TM} Mix

Erysimum sp. ■ 18-22°C/64-72°F
■ 8-10 days



- Charity is a very unique wallflower that blooms in both autumn and spring
- ●Flowers can withstand frosts as low as -4°C / 26°F with no damage, and plants can overwinter in mild climates
- Day-length neutral and no vernalisation required for blooming
- The compact plants are excellent for pots and garden use and its sweet fragrance greatly adds to consumer appeal







Dianthus

F1 Telstar_{TM} series

Dianthus chinensis x barbatus 21-24°C/70-75°F 5-6 days



- Telstar is floriferous with excellent pack and garden performance, and also recommended for bedding and landscaping use
- The series produces vibrant flowers on well-branched plants
- Telstar was developed to have a high degree of resistance to Phytophthora and other damp-off pathogens, and is also resistant to both heat and frost
- Telstar White may have some pinkish flowered plants depending on climate conditions







Carmine Rose



Coral

Picotee FND534



Crimson FND531







FND536



















F1 Carpet_{TM} series

Dianthus chinensis



- Carpet earns its name by forming a carpet of large flowers on heavily branched plants
- It is a compact series excellent for pot and bedding production

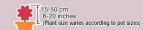






Big Smile_{TM}

Helianthus annuus 20-25°C/68-77°F 3-4 days

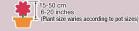


- Big Smile is a dwarf OP variety
- Ideal for spring to summer production, but can also be used for production any time of year with sufficient temperature
- Big Smile is suitable for pots and containers, good for impulse sales at retail
- It blooms in 50-55 days



F1 Smiley_{TM}

Helianthus annuus 20-25°C/68-77°F 3-4 days



- F1 hybrid pollenless dwarf Helianthus
- Smiley was named with our hope of spreading happiness and smile with exuberant flowers
- Improvement of Sunny Smile, high uniformity and more branching
- Regarding day length, it flowers all year round in about 55 to 60 days when grown temperatures above 15°C/60°F



Fantasista_{IM} series

Linaria maroccana

20-21°C/68-70°F 15-20 days 9,500-17,000 sd/g



- All varieties of Fantasista are bred to be extra dwarf, good basal branching and extra early maturity
- The crop grows year-round in cool, mild areas
- •Will withstand frosts and short duration freezes to -4°C / 26°F without injury
- It is especially suitable for mass plantings and is often used in hanging baskets and mixed containers to provide bright colour accents



FLN133 (raw) FLN143 (multi pelleted)



FLN132 (raw) FLN142 (multi pelleted)



Rose FLN131 (raw) FLN141 (multi pelleted)



FLN135 (raw) FLN145 (multi pelleted)





FLN134 (raw) FLN144 (multi pelleted)



isianthus (Eustoma)





F1 Carmen_{IM} series

Eustoma grandiflorum

Light required 15-20°C/59-68°F 20-25 days



- Excellent pot Lisianthus bred especially for its high quality root system
- It has more disease resistance against damping off from soil bacteria such as Fusarium
- Carmen produces many medium sized, long lasting flowers

Blue Rim











FRS152 (Formerly FRSG04)



(Formerly FRSG07)

FRS154 (Formerly FRSG06)



F1 Julietta_{TM} series

Eustoma grandiflorum □ 15-20°C/ 59-68°F □ 20-25 days



- It has great compactness and flower earliness compared to other pot lisianthus
- It has double flower and fringed petals







Pink



White

F1 Rosie_{TM} series

Eustoma grandiflorum Light required 15-20°C/59-68°F 20-25 days



- Rosie produces very attractive fully double, long lasting flowers
- Genetically dwarf pot Lisianthus with improved root quality



Lavender Blue FRS171 (Formerly FRSG21)



FRS175 (Formerly FRSG25)



Rose Picotee (Formerly FRSG22)



(Formerly FRSG23)



FRS174 (Formerly FRSG24)

Harmony_{TM} series

Matthiola incana Dark required 0 18-21°C/64-70°F 4-5 days



Selectable type

- · Seedlings are selectable for doubleness
- Uniform, dwarf, branching series with excellent fragrance
- Harmony has approximately 50% doubles and is selectable for doubleness by the cotyledon (See the below)
- Good for cool season production in pots or containers







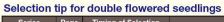
FST722





Not Pictured

FST720



Series	Page	Timing of Selection			Selection Method		
Harmony	32			Double:		Single:	Darker gree
Xmas	79	A pair of cotyledons	Select by colour, size and shape of cotyledon, also by growing speed	Lighter green Larger leaves		PROPROP	Smaller leav
Glory	79				Grow faster (Taller)		Grow slower (Shorter)
Cinderella	33	Cotyledons and true leaves	Select by colour of leaves. Can be put in cold strage of 8°C/46°F for 2-3 days in cotyledon stage, then colour difference will be more clearly		Double: Lighter green Larger leaves		Single: Darker green Smaller leaves
Canneto	80	Not needed		Average	of 90% double-flower	ing type	
Noble	80	Not needed		Average	of 30 % double-flower	ing type	

The above data is based on trials completed in Japan.

Actual results are dependent upon environmental conditions and local practices that may affect variety characteristics and performance

Matthiola (Stock)





Cinderella_{IM} series

Dark required 18-20°C/64-68°F 3-5 days



Selectable type

- · Seedlings are selectable for doubleness
- Dwarf selectable Matthiola with hairy leaves
- The double flower plant ratio of Red and White is less than the remaining colours in the series
- Seedlings are easily selectable for doubleness after they are exposed to cold temperatures below 8°C/46°F with light. Double flower seedlings will show pale green cotyledons and single flower seedlings will show dark green cotyledons (See page 32)





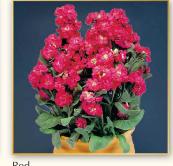
Hot Pink





Lavender

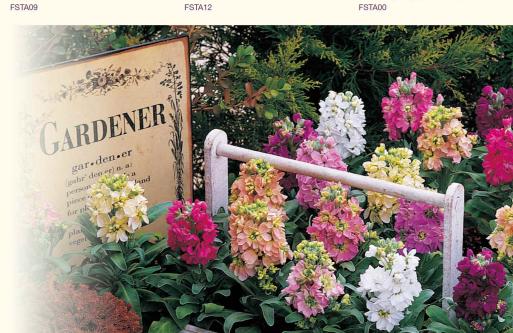








Vivid Formula Mixture



Jackpot Gold_{TM}

Melampodium paludosum

Temp. fluctuation is preferable 20-30°C/68-86°F 58-10 days



- Improvement of Million Gold with larger flowers and round shaped leaves
- Vigorous plant habit and more floriferous than Million Gold
- Self-cleaning habit, new flowers cover the old flowers so plant continues to have fresh flowers showing all season long
- Blooms continuously until first frost
- Blooms in 80 to 95 days from sowing
- These dwarf varieties are excellent for packs, 10 cm / 4 inches pots, and for landscapes





Lemon Delight_{TM}

Melampodium paludosum

Temp. fluctuation is preferable 20-30°C/ 68-86°F 8-10 days



- Bright yellow flowers make a good combination with Jackpot Gold in the garden
- Blooms continuously until first frost
- Blooms in 80 to 95 days from sowing
- These dwarf varieties are excellent for packs, 10 cm/4 inches pots, and for landscapes

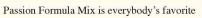


Passion_{TM} series

Osteospermum ecklonis 18-22°C/64-72°F 8-10 days



- Heavily-branched, compact and bushy variety which does not need pinching
- Passion Mix has been switched to Passion Formula Mix (set percentages of each colour)
- Unlike the vegetative varieties, seed-raised Passion series retains its compact habit very well
- They grow and flower almost year-round in mild areas, with the heaviest blooming period in early spring through early summer
- Plants are well adapted to container culture such as colour bowls and combination planters





Formula Mix







Clean Scarlet_{TM}

Viola wittrockiana

- 18-20°C/ 64-68°F 7-13 days
- Clean Scarlet is among the brightest of the scarlet coloured

Pansies

It is excellent for bedding and container use





F1 Imperial_{IM} Antique Shades

Viola wittrockiana

- 18-20°C/ 64-68°F 0 7-13 days
- Suitable for pots and packs as well as mixed container production
- Imperial Antique Shades shows various colour ranges



F1 Nature_{TM} series

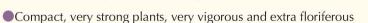
Viola wittrockiana □ 18-20°C/ 64-68°F □ 7-13 days



Martures

Pansy (Viola wittrockiana)

A breakthrough in breeding, a true multiflora pansy and viola cross with flowers that completely cover the plants



- •Wide colour range including many unique colours, excellent for both spring and fall sales
- Strong landscape performer fast rebound from rain and freezes, outstanding winter survivability
- "A Landscaper's Dream" perfect for mass plantings and mixed containers as well as for pots and packs







Beacon



Blue and Yellow



Clear Yellow



Frosty Blue







Lemon Yellow



Mulberry Shades





Orange



Plum Purple



Red with Blotch



Rose Picotee



Rose Pink



Rose with Blotch



White FPA724



Yellow with Blotch FPA749



Formula Mixture





Any landscape pattern is possible with Nature

Petunia

Germination Temperature Days to Emergence

F1 Opera Supreme_{tm} series

Petunia hybrida

Light required 22-25°C/72-77°F 5-10 days



Trailing type

- Opera Supreme has a very floriferous habit, less day length sensitivity, and a low, spreading habit that are key characteristics preferred for trailing petunias
- Its flowers have a very attractive iridescent quality, or sheen, and are borne in great profusion from the centre to the tips on the spreading plants
- Outstanding in garden beds, window boxes, combination pots and hanging baskets
- Red has a more vigorous plant habit than other trailing petunias in the red colour segment
- Opera Supreme White may have some pinkish flowered plants depending on climate condition



Lavender





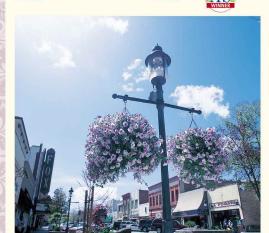




Lilac Ice

Pink Morn FPT633

Its excellent spreading habit is suitable for hanging baskets



F1 Opera Supreme provides season-long colour to city landscapes



Purple FPT631

Red

FPT637





Raspberry Ice

Purple Vein







White

F1 Trilogy_{TM} series

Petunia hybrida

Light required 22-25°C/72-77°F 5-10 days



Mounding type

- The plant is a mounding type with a good branching habit, while keeping a tidy, compact habit
- Strong flower petals stand up to humid conditions
- Reaching a height of about 15-25 cm / 6-10 inches, and a width of 50-60 cm / 20-24 inches when fully mature, Trilogy is a fabulous landscape and container performer
- Series requires less PGR use, adapts to any protocol









Pink Lips













FPT643

Scarlet

Silver Blotch





Growers:

No special technique, adapts to your protocol

Retailers:

Long shelf life, no more tangling

Consumers:

Minimal care, maximum performance all season

Petunia

F1 Evening Scentsation_{TM}

Light required 22-25°C/72-77°F 5-10 days



Trailing type

- Evening Scentsation is the first petunia which earned an AAS regional award for its lovely fragrance and stunning colour
- Evening Scentsation's fragrance has notes of hyacinth, sweet honey and rose
- As its name implies, Evening Scentsation's fragrance is stronger in the evening hours, and can be experienced throughout the day as well

(Scent is perceived differently by each individual)







The basic fragrance of Evening Scentsation is derived from phenylacetaldehyde, which has a hyacinth-like scent, 2-phenylethanol, which has a rose-like scent, and methyl benzoate, which has a dry fruit-like scent. The largest release of scent compounds by Evening Scentsation occurs during the switch from light periods to dark periods.

The article of characteristic of floral scent compounds in Evening Scentsation was published in The Horticulture Journal.

https://www.jstage.jst.go.jp/article/hortj/advpub/0/advpub_OKD-090/_ article/-char/en

Series	F1 Trilogy	F1 Evening Scentsation	F1 Opera Supreme					
Туре	Multiflora							
Type	Mounding	Tra	iling					
	6.5-7.5 cm / 2.6-3.0 inches	7 cm / 2.7 inches	6.5-7.5 cm / 2.6-3.0 inches					
Flower size								
Plant habit in pot (10 cm/ 4 inches)								
	50 15-25 cm / 6-10 inches 50-60 cm / 20-24 inches	15-25 cm / 6-10 inches 80-90 cm / 32-35 inches	10-20 cm / 4-8 inches 80-100 cm / 32-39 inches					
Plant habit	30							
in garden	20							
-	0 10 20 30 40 50 60	0 10 20 30 40 50 60 70 80	0 10 20 30 40 50 60 70 80 90					



Cameo Elegance_{TM}

Pharbitis purpurea (Ipomoea purpurea) 20-30°C/68-86°F 4-5 days



- Variegated foliage with flowers of rose-red with white throats make Cameo Elegance a novelty item
- It blooms most prolifically under short-day conditions
- Excellent packet seed item due to ease of culture
- The plant can be used in many different styles, such as trailing pot, landscape ground cover, hanging basket and climbing vine



FAA451 Trailing vines add dimension to containers

Summer Jewel_{TM} series

Salvia coccinea 20-25°C/ 68-77°F 5-10 days



- Amazing performance, blooms heavily all summer
- Excellent branching habit produces a multitude of flower spikes
- Vivid flowers attract hummingbirds
- Significantly earlier than other existing varieties under long day conditions
- All colours of Summer Jewel series are awarded by All-America Selections













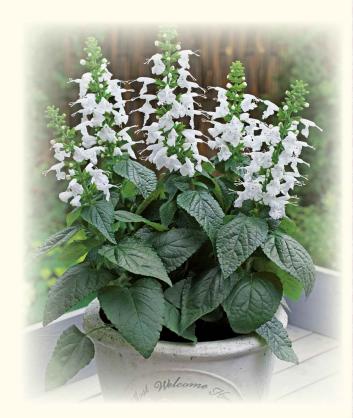












Pot and Bedding

Hummingbird_{TM} series

20-25°C/68-77°F 5-10 days



- Extremely long blooming time attracts consumers
- •Well branched plants with brilliant flowers appear about 11 weeks from sowing
- Can be used for bedding, planters, baskets, pots and borders









FSRA11

Forest Fire FSRA13



FSRA14

Fizz_{TM} series

Salvia splendens 20-25°C/68-77°F 5-10 days



- Fizz series is early to flower with densely packed flower columns which give each plant a strong show of colour
- Flowers are long lasting at consumer level as well as a long shelflife at retail
- The branching habit gives a fullness to the plant and the flower colour contrast to the dark foliage gives a better colour show in the landscape















Raspberry

Strawberry

Early Perfection_{TM} series

Light required 20-24°C/68-75°F 10-14 days



- Produces a beautiful display of colourful daisy-like flowers
- Dwarf, compact plants that are suitable for pot use







Germination Temperature Days to Emergence

Purple FSN315







<Disclaimer> Genetically few percentages of pink color may appear

Serenity_{TM} series

Verbena x hybrida 20-30°C/68-86°F 15-20 days



- Serenity Mix is an excellent mix of pastel lavenders, white, carmine red to pink
- Its deeply-cut fern-like foliage is dark forest green
- In cool climates it will stay dwarf, producing a carpet
- In warmer areas the Serenity series will be a perennial







Mix FBB210



Viola (Viola cornuta)

F1 Floral Power® series

Viola cornuta □ 18-20°C/ 64-68°F
□ 7-15 days



- Mound type viola which produces an abundance of round-shaped, thick petaled flowers on compact yet vigorous plant
- Excellent for early spring sales





Cream Yellow Lip Deep Blue FBRE16





Deep Orange FBRE18









Lavender Blue









Orange Red Wing FBRA05









Pink with Lemon Lip



Plum Antique



Purple Face FBRA35







Raspberry FBRE15





Yellow Blotch FBRE04





Yellow Purple Wing FBRA28



Yellow Red Wing FBRE13





Yellow Surprise FBRE00





Viola (Viola cornuta)

F1 Gemm series

Viola cornuta 18-20°C/64-68°F 7-15 days



- The wide and unique colour assortment of this series provides a complete range both for consumers as well as professional landscapers
- The Gem series has strong over-wintering ability as well as exceptional heat tolerance
- Gem is excellent for colour bowls, containers, pots, hanging baskets, and landscapes



Apricot Antique FBR537



Electric Blue



Aztec FBR573



Beacon FBR561



Clear Ocean FBR540



Fire FBR572



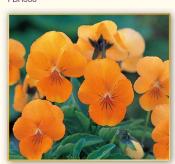
Frosty Blue FBR567



Heavenly Blue



Lavender Antique



Orange FBR535





Rose Antique FBR578





Rose with Blotch FBR532



Scarlet FBR569





White Imp. FBR544



Yellow FBR571





Belize_{TM} series

Zinnia hybrida 20-25°C/68-77°F 5-6 days



- Takii's new interspecific Zinnia, it has excellent compactness and heat tolerance
- Belize series have floriferous and early flowering
- It has long shelf life which you can enjoy flower for a long time in your garden



Cherry FZN734



Rose FZN731







Belize Double_{TM} series

20-25°C/ 68-77°F 5-6 days



- Double type interspecific Zinnia
- Main characteristics are same as Belize series
- From its colour wize you can use Belize Double to make your garden more colorful and gorgeous
- Belize Double Scarlet has won the Gold Medal of Fleuroselect
- Belize Double Rose and Orange has earned Fleuroselect Novelty









White FZN742











F1 Preciosa_{TM} series

Zinnia elegans 20-22°C/ 68-72°F 5-6 days 120-150 sd/g



- Preciosa series has outstanding vivid colour and voluminous flowers with compact habit
- More compact and well-branched plants produce lavish amounts of higher doubleness, muy atractivo!

<Disclaimer>

Individual plants may exhibit differences of colour, doubleness and plant height



prěciosa

FZN552 (raw) FZN582 (slick coated)



Orange FZN557 (raw) FZN587 (slick coated) APPROVED PLUROSELLET NOVELTY



FZN554 (raw)



FZN558 (raw) FZN588 (slick coated)



FZN555 (raw) FZN585 (slick coated)



Scarlet FZN553 (raw) FZN583 (slick coated)



FZN556 (raw) FZN586 (slick coated)



Yellow FZN551 (raw) FZN581 (slick coated)



Premium Mix FZN561 (raw) FZN580 (slick coated)

F1 Dreamland_{IM} series

Zinnia elegans 20-22°C/ 68-72°F 5-6 days 100-200 sd/g



- Takii's Dreamland is an early, large dahlia-flowered type providing a great colour show both in containers and in the garden
- Excellent choice for pot and pack sales, with great consumer appeal
- <Disclaimer>

Individual plants may exhibit differences of colour, doubleness and plant height









Yellow FZN624









Mix FZN629

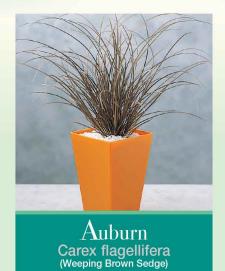




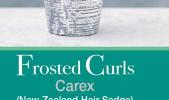
Pot and Bedding

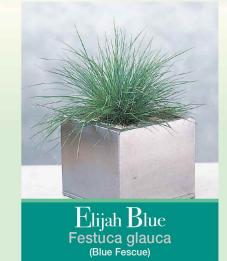
Grasses, Sedges and Rushes











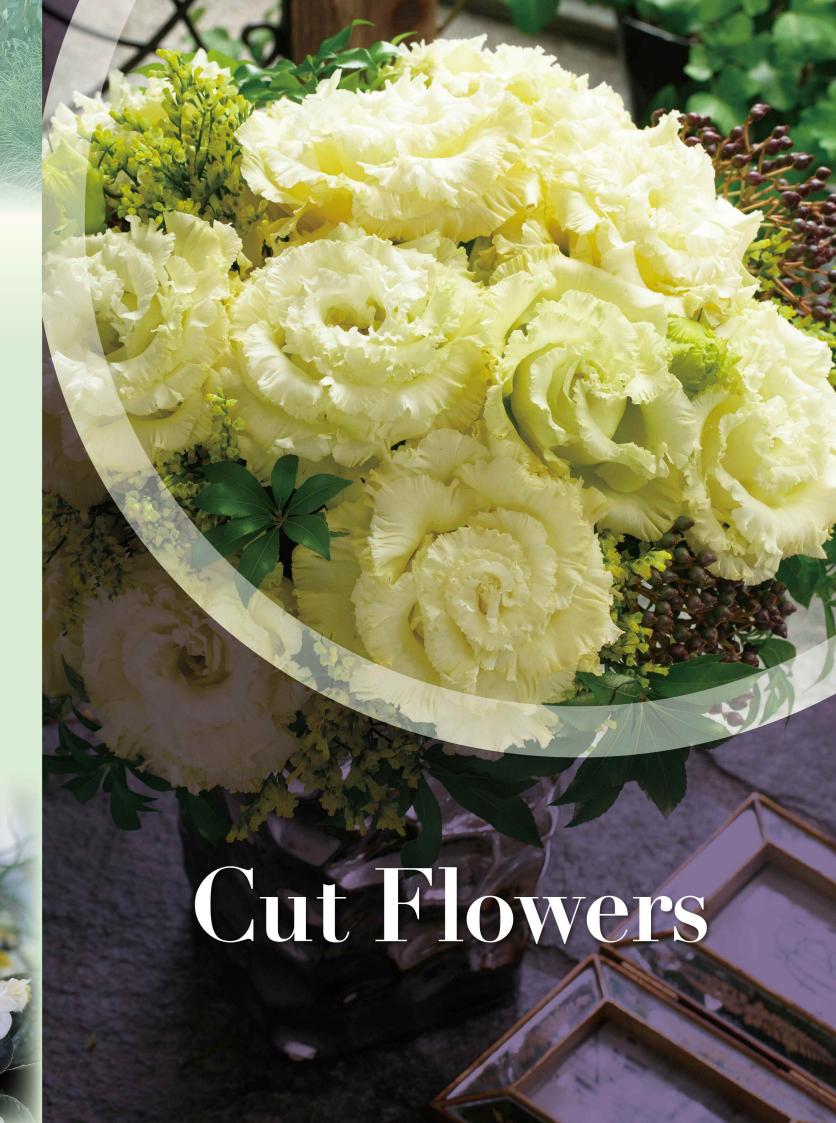


- Use as landscape, garden or pot plant
- Easy to produce, high ornamental value
- Energy saving program
- Heat tolerant, low maintenance
- Develop your own grass assortment or combine with colour items
- Long shelf life = Long sales window



Angel Hair
Stipa tenuissima
(Esparto Grass)

Genus	Species	Variety name	Germ Info	Germination	Temperature	Days to	Plant	Height	Remark
Genus	Species	variety name	Germ into	°C	°F	Emergence	cm	inch	нетагк
Carex	flagellifera	Auburn	Light required	18-22	64-72	25-35	35	14	Bronze-red leaves
Carex	-	Frosted Curls	Light required	18-22	64-72	12-20	25	10	Very hardy ornamental grass which can be used for mixed containers and landscapes 5-6 months from sowing to sell, but can be shortened with multiple sowing
Festuca	glauca	Elijah Blue	Light required	18-20	59-68	7-14	25	10	Extremely hardy perennial, it is one of the most important landscaping grasses Prefers full sun and well drained conditions Multiple sowing will shorten the growing time to finishing
Stipa	tenuissima	Angel Hair	Light required	18-20	59-68	7-10	70	28	Thread-like, shiny light green leaves give a silky and elegant appearance It can be used in various ways such as for mixed containers and rock gardens as well as dried cut flowers
								per l'	



Antirrhinum (Snapdragon)

54

Germination Temperature Days to Emergence Stem Length



F1 Legend_{TM} series Antirrhinum majus

Light required 15-20°C/59-68°F 10-12 days



Sturdy stems and strong flower petals for good cut flower transportation and vase life

• Dense flower spikes and intense colours make an impressive accent in flower arrangements

Legend series

• Light Pink is slightly shorter (95 cm / 37 inches) height than other colours (100-130 cm / 39-51 inches)

Legend Imp. series

- It has longer spike than the exsisting variety
- Plant height is little taller than previous variety
- Flowering speed is almost the same or slightly earlier



Light Pink



Light Yellow





Yellow







Yellow Imp.

F1 Chantilly_{TM} series

Antirrhinum majus Light required 15-20°C/59-68°F 10-12 days



- Takii's open-faced Antirrhinum Chantilly has large flowers with an overall gorgeous impression
- Unique Snapdragon for short day and low temperature conditions







Light Salmon





Deep Orange



Velvet



Carias	Variati	Plant	Flower Size		
Series Variety		Height	cm	inch	
	Light Pink	В	4.0	1.5	
	Light Yellow	В	4.0	1.5	
	Pink	В	4.0	1.5	
Legend	White	В	4.0	1.5	
	Yellow	В	4.0	1.5	
	White Imp.	А	4.5	1.75	
	Yellow Imp.	Α	4.5	1.75	
	Bronze	A	5.0	2.0	
	Cream Yellow	В	5.0	2.0	
	Deep Orange	С	5.0	2.0	
	Light Pink	В	5.0	2.0	
Chantilly	Light Salmon	A	5.0	2.0	
Chantilly	Pink	В	5.0	2.0	
	Purple	В	5.0	2.0	
	Velvet	В	5.0	2.0	
	White	С	5.0	2.0	
	Yellow	В	5.0	2.0	
in Nagano pr	ased on trial results efecture, Japan. set at 8°C/46°F during night	Taller A B Shorter C			

The above data is based on trials completed in Japan. Actual results are dependent upon environmental conditions and local practices that may affect variety characteristics and performance.





Brassica (Flowering Kale)

F1 Crane_{TM} series

Brassica oleracea



Ruffle leaved type

- New fringed type in Crane series
- Vigorous plant habit, growers can easily secure plant height
- *Bicolor is slightly shorter than the other colours

Feather leaved type

- Cut flower Brassica with featherly leaves
- Feather Queen and Feather King have a very uniform, upright habit and complement each other very well

Round leaved type

- •Winter bouquets are much more charming with the round shape, varied colours and long-lasting vase life of the Crane
- Genetically, the flower head was bred to be compact; however, plant spacing will determine the size of the flower as well
- Crane Carmine, Pink, Red and White have a very uniform, upright habit and complement each other very well

Ruffle



Ruffle Bicolor



Ruffle Rose





Ruffle White

Feather



Feather King



Feather Queen



Arrange Green Green feathery leaves are suitable for filler materials in bouquets and flower arrangements



Round

Takii's Brassica Variety Comparison

among Cut Flower types	
Variety	Plant Height
Crane Ruffle Bicolor	3
Crane Ruffle Red	5
Crane Ruffle Rose	3
Crane Ruffle White	4
Crane Feather King	3
Crane Feather Queen	2.5
Crane Bicolor	2.5
Crane Carmine	4
Crane Pink	2.5
Crane Red	2
Crane Rose	2
Crane White	3
Flare Rose	4
Flare White	5
Lucir Rose	2.5
Lucir White	3
Shor	1 → 5 ter → Talle



Bicolor





Unique cut leaves accentuate flower arrangement











Cut Flower

Germination Temperature Days to Emergence Stem Length





58

F1 Flare_{TM} series

Brassica oleracea 20-25°C/68-77°F 4-5 days



- Very early maturity and easy to get tall stem
- Flare Rose and Flare White have very uniform, wavy leaves, upright habit
- Flare White has such a pure white colour that is also well suited for dyeing



Rose FHB693





F1 Flare Rose with blue dye. After dyeing, Flare Rose presents a charming vintage look



F1 Lucir_{TM} series

Brassica oleracea 20-25°C/68-77°F 4-5 days



- A very unique Brassica which has glossy green leaves
- In comparison to existing Brassica, the waxless glossy leaves of this Brassica show better colour contrast of the centre colouring



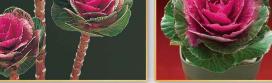
Left: F1 Lucir Right: F1 Crane Lucir has glossy green leaves



The stunning Lucir Rose blended with the ever-popular rose brings beautiful colour, texture and lasting abilities in floral designs



FHB711







Star_{tm} series

Calendula officinalis Dark required 21-24°C/ 70-75°F 58-10 days



- Highly valued for cut flower use with tall, sturdy stems and large double flowers
- The Star series is bred with special attention to higher disease resistance and good productivity





60

allistephus(Aster)

Optimo_{TM} series

Callistephus chinensis □ 15-20°C/ 59-68°F □ 7-10 days



- Brand-new series from Callistephus
- It has large flower size with impressive colour and Fusarium tolerance
- Less basal branching and top flowering









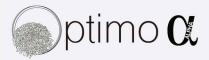


Optimo α_{TM} Light Blue

Callistephus chinensis □ 15-20°C/59-68°F □ 7-10 days



- Unique flower shape with extra-large double flower
- Characteristics are almost same as Optimo series
- It has Fusarium tolerance







Fujimi_{TM} series

Callistephus chinensis □ 15-20°C/59-68°F □ 6-8 days



- Fujimi has three-dimensional shaped double-flowers
- Fujimi has more Fusarium resistance when compared to other varieties, resulting in reduced losses in production
- Spray type (less basal branching) plant habit and smaller leaves is suitable for dense planting











Coral Rose

Kurenai_{TM} series

Callistephus chinensis 20-25°C/68-77°F 56-8 days



- Good branching habit
- Semi-double flowers of medium size











62

Callistephus(Aster)

Nina_{TM} series

Callistephus chinensis 15-20°C/59-68°F 6-8 days



- Nina has large numbers of small semi-double flowers on vigorous plants
- Nina series has more disease resistance when compared to other varieties, resulting in reduced losses in production
- This spray-type Callistephus is excellent for mixed bouquets











Nina Plus_{TM} series

Callistephus chinensis □ 15-20°C/59-68°F □ 7-10 days



- Strongest Fusarium resistance series within Takii's callistephus assortment
- Small semi-double flowers
- Vigorous habit with excellent flower uniformity within series









Daylight_{TM} series

Callistephus chinensis □ 15-20°C/ 59-68°F □ 6-8 days



- •Vigorous plants produce large numbers of small single flowers
- Blue Frost and Rose Frost change petal colours from white to blue or white to rose as each flower matures which makes an attractive colour gradation on each stem
- All colours of Daylight series have Fusarium resistant



















Takii's Callistephus Variety Comparison among Series

Туре	Series	Variety	Flowe	er Size	Branching	Plant	Stem	Fusarium	Characteristic
туре	Series	variety	cm	inch	Brancining	Height (cm)	Strength	Resistance	Gliaracteristic
Large double Optimo Flowered	Deep Purple	7.5-9	2.9-3.5	Less	75-85	Very Hard	R	Less basal branching (Upper branching)	
	Red	7-9	2.9-3.5	Less	70-80	Very Hard	R	Less basal branching (Upper branching)	
Extra large double Flowered	Optimo a	Light Blue	8-10	3.1-3.9	Less	75-85	Very Hard	R	Less basal branching (Upper branching)
		Coral Rose	4-5	1.6-2	Less	90-100	Very Hard	R	Less basal branching (Upper branching)
Double Flowered	Fujimi	Purple	4-5	1.6-2	Less	90-100	Hard	R	Less basal branching (Upper branching)
		Scarlet	4-5	1.6-2	Less	90-100	Very Hard	R	Less basal branching (Upper branching)
		Pink	4	1.6	Good	70-80	Hard	Non R	Hard stem. Relatively less branching
	Nina	Purple	4	1.6	Good	70-80	Hard	R	Hard stem. Good basal branching
Semi		Salmon Pink	4	1.6	Good	70-80	Normal	Non R	Good basal branching
double Flowered		Purple	3	1.2	Good	65-75	Normal	R	Little early flowering in Nina Plus series
. 10 11 01 04	Nina Plus	Scarlet	3	1.2	Good	70-80	Hard	R	Top flowering
		White	3	1.2	Good	70-80	Hard	R	Top flowering
		Blue Frost	2-3	0.8-1.2	Good	70-80	Hard	R	Flower colour changes from white to blue
		Purple	2-3	0.8-1.2	Good	70-80	Hard	R	
Single		Red	2-3	0.8-1.2	Good	65-70	Very Hard	R	
Flowered	Daylight	Rose Frost	2-3	0.8-1.2	Good	70-80	Hard	R	Flower colour changes from white to rose
		Rose	2-3	0.8-1.2	Good	70-80	Hard	R	
		White	2-3	0.8-1.2	Good	70-80	Hard	R	

The above data is based on trials completed in Japan. Actual results are dependent upon environmental conditions and local practices that may affect variety characteristics

- <Disclaimer>
 *1. Takii's Fusarium resistant Callistephus highly restricts the growth and development of the above stated pathogen and the damage they cause under normal pathogen pressure when compared to susceptible varieties. It may, however, exhibit some disease symptoms or damage under heavy pathogen pressure.
 - *2. New and / or atypical strains of the specified pathogen may overcome the resistance, sometimes completely.

Cut Flower

Germination Temperature Days to Emergence Stem Length





Kinkom and Zanzibarm

Carthamus tinctorius Dark required 15-20°C/ 59-68°F 4-6 days



- High quality cut flower item, can be harvested about 90 days after sowing
- Carthamus is sensitive for Manganese deficit. Leave fertilizing is effective to prevent this problem





Kurume_{TM} series

Celosia cristata Dark required 20-25°C/ 68-77°F 8-10 days



- Kurume varieties are crowned with grand combs of vivid colour
- They have very high tolerance to heat, drought and disease, and are prized for summertime cut flower use
- Dense planting, spaced 10-15 cm/ 4-6 inches apart will produce smaller combs and thinner stems











Cannes_{TM} series

Consolida spp. Dark required 13-18°C/ 55-64°F 10-20 days



- Cannes series is disease resistant when compared to the other varieties, with much reduced losses in production
- Warm temperatures and long-day conditions induce flowering
- For harvest in winter season under short-days and cold conditions, maintaining temperatures above 10-13°C/50-55°F at night and providing day-length extension of 4 to 6 hours encourages better stem elongation and flower development





Crystal Pink



Deep Blue



Lilac







White

F1 Aurora_{TM} series

Delphinium elatum Dark required 15-20°C/59-68°F 10-12 days

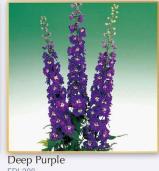


- Takii's F1 hybrid Aurora Delphinium's popularity continues to increase due to its outstanding performance as a cut flower as well as a garden perennial
- Excellent uniformity and quality
- Stems are very sturdy and leaves are relatively small, which make it ideal for cut flower use





FDL205









Light Purple





Aurora can be used as garden plants or large container plants

Variety Comparison among Series

V ariety	Flowe	er Size	Dlen	t Height
variety	cm	inch	Fian	t neight
Blue	5.5	2.2	С	Taller A
Deep Purple	5.5	2.2	А	1
Lavender	6.0	2.5	С	
Light Blue	5.5	2.2	В	В
Light Purple	5.5	2.2	С	
White	6.0	2.5	С	Shorter C

The above data is based on trials completed in Japan. Actual results are dependent upon environmental conditions and local practices that may affect variety characteristics and performance

Seed Storage

Store seeds under dry and low temperature (approx. 5°C/40°F) condition. Storing seeds at room temperature (above 18°C/46°F) may result in very low germination.

Tips for cultivation

•Warm temperatures and long day conditions induce flowering.

- •Plug finish time is 5-6 weeks. During this time, optimal growing temperatures are
- •2-3 weeks after transplanting the flowering stems will start to elongate.
- •Short day conditions will induce rosetting. When plants have fewer than 5 true leaves, temperatures below approximately 15°C/60°F will also induce rosetting.
- •Under short day conditions, 4 hours of night interruption will help initiate and develop

Cut Flower

Germination Temperature Days to Emergence Stem Length

F1 First Love_{TM}

Dianthus hybrida 21-24°C/70-75°F 5-6 days



- First Love produces serrate-edged flowers changing from white to pink as the individual flowers age
- Excellent continuous flowering habit until a hard freeze
- Thin but very sturdy spray-type stems are good performers as a cut flower as well as garden plant





Purple Sheen_{tm}

Eryngium leavenworthii 20-25°C/68-77°F 12-20 days



- •Vibrant purple-crimson flowers on sturdy stems with soft bracts can be great as a vase filler
- 6-7 months from sowing to flower
- The plants prefer sunny and dry conditions





Audray_{IM} series

Gomphrena globosa 22-25°C/72-77°F 10-12 days



• Audray can be used both for fresh and dried arrangements



Pink

Bicolor Rose









F1 Sunrich_{TM} series

20-25°C/68-77°F 3-4 days



66

55-70 day type

- The Sunrich series has superb quality and is maintaining its leading status in the Helianthus market
- Flowers of the Sunrich series are pollenless, long-lasting, densely petaled and have strong stems
- The series flowers in 55-70 days after sowing depending on growing conditions
- F1 Sunrich Orange DMR is the world's first Downy mildew highly-resistant variety for ornamental Helianthus
- With the introduction of F1 Sunrich Orange DMR, Helianthus production will be drastically changed. Growers have less to worry about when it comes to problems with Downy mildew. This DMR breakthrough's added-value provides substantial benefits with high yield results and the reduction of chemical use
- Resistant to multiple strains of downy mildew (Plasmopara halstedii)
- Plant height, growing speed as well as flower shape and colour are similar to F1 Sunrich Orange
- *1. F1 Sunrich Orange DMR highly restricts the growth and development of the above stated pathogen and the damage they cause under normal pathogen pressure when compared to susceptible varieties. It may, however, exhibit some disease symptoms or damage under heavy pathogen pressure.
- 2. New and / or atypical strains of the specified pathogen may overcome the resistance, sometimes completely















Lime

Orange

Orange DMR

What is Downy Mildew (Plasmopara halstedii)?











Plasmopara halstedii is one of the major plant pathogens that infect Helianthus. The symptom shows as light yellowish-green spots on the upper side of leaves alongside main veins.

It eventually grows and spreads to become a lesion, and on its underside light gray

Severely infected plants will not have ornamental value.

The stems will not reach enough height and will not be good quality cut flowers.



68

Helianthus (Sunflower)

F1 Sunrich Summer_{TM} series

Helianthus annuus 20-25°C/68-77°F 3-4 days



50-65 day type

- Orange Summer DMR has high resistance against Downy Mildew. Plant height, growing speed as well as flower shape and colour are similar to F1 Sunrich Orange Summer
- Limoncello Summer presents a stable bicolour of vibrant yellow transitioning to a light, creamy yellow at the tips. This uniqueness brings a great accent to the Helianthus market
- ●F1 Sunrich Orange Summer and Lemon Summer flower 5 to 10 days earlier than F1 Sunrich Orange and Lemon, but the flower shapes and colours are identical to Sunrich Orange and Lemon, respectively
- Suitable for spring to summer cultivation with sowing and growing under long-day conditions





Limoncello Summer







F1 Premier_{tm} series

Helianthus annuus 20-25°C/68-77°F 3-4 days



45-55 day type

- Premier series is a nonbranching F1 hybrid pollenless Helianthus
- Premier is extra-early offering a very short crop time of approximately 45-55 days from sowing with excellent uniformity
- Sowing is recommended under long day conditions for early summer harvest to secure enough stem length



Lemon





Light Yellow



Orange

F1 Marley_{TM}

20-25°C/68-77°F 3-4 days



- Marley has unique colour combination of cream and purple
- Good plant height
- Genetically some colour variation



Helianthus annuus 20-25°C/68-77°F 3-4 days



- Compared to Marley,
- colour combination of yellow and brown
- less side-shooting
- 3-5 days late flowering
- Under warmer and strong light intensity condition, colour might be deeper
- Genetically some colour variation





Cut Flower

F1 Full Sun Improved_{TM}

Helianthus annuus 20-25°C/68-77°F 4-6 days



55-100 day type

- It can have sufficient stem length even under short-day conditions in the temperate climate area
- It is preferable to have 18°C/65°F at the lowest temperature for growth
- Depending on conditions such as low temperatures, the culture time can be even longer than the stated 55-100 days



Variety	Petal	Disk	Days to bloom	Remark	
1 Sunrich Gold	Orange	Green			
1 Sunrich Lemon	Yellow	Black			
1 Sunrich Lime	Yellow	Green	55-70 days	The quality standard in the market	
F1 Sunrich Orange	Orange	Black			
F1 Sunrich Orange DMR	Orange	Black		Downy mildew highly-resistant	
F1 Sunrich Lemon Summer	Yellow	Black			
F1 Sunrich Limoncello Summer	Lemon with yellow base	Black	50-65 days	5-10 days earlier than Sunrich Orange	
F1 Sunrich Orange Summer	Orange	Black	50-65 days	5-10 days earlier than Sunnch Orange	
F1 Sunrich Provence Summer	Deep Orange	Black			
F1 Sunrich Summer Orange DMR	Orange	Black	50-65 days	Downy mildew highly-resistance.	
F1 Premier Lemon	Yellow	Black			
F1 Premier Light Yellow	Light Yellow	Black	45-55 days	Extra-early varieties	
F1 Premier Orange	Orange	Black			
F1 Marley	Cream/Purple bicolour	Black	45-70	Early flowering under short-day condition.	
F1 Ziggy	Yellow/Brown bicolour	Black	45-70	Compare to Marley, 3-5 days late flowering.	
F1 Full Sun Improved	Dark Yellow	Black	55-100 days	Sufficient stem length even under short day conditions	

Pastel Shades_{TM}

Limonium sinuatum □ 15-20°C/59-68°F □ 10-15 days



- Pastel Shades is an early-flowering variety of Limonium (Statice)
- Long-lasting as a fresh cut flower, Pastel Shades is also excellent when used dried in arrangements



Germination Temperature Days to Emergence Stem Length

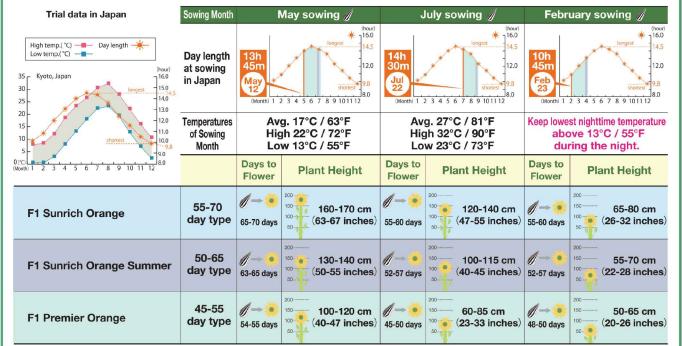




70

elianthus(Sunflower

1: Effects of day length and temperature on plant height and days to flower



All information is based on trials completed in Japan. Actual results are dependent upon environmental conditions and local practices that may affect variety

2: Proper varietal cultivation

- Day length and light intensity are factors that influence the stem length of the Sunrich and Premier series.
- Long-day cultivation will produce longer stems, short-day cultivation will result in shorter stems.
- If F1 Sunrich Orange (55-70 day type) grows too tall, F1 Sunrich Orange Summer (50-65 day type) may present a better choice as its plant height is 15%-20% shorter.
- F1 Sunrich Orange Summer (50-65 day type) can save approximately 5-10 days in cultivation time over F1 Sunrich
- The F1 Premier series (45-55 day type) offers a very short crop time. Sowing is recommended under long-day conditions for an early summer harvest to yield sufficient cut stem length.
- For the F1 Premier series, short-day conditions at the sowing and young plant stage may result in insufficient height for cut flower use.

Cultivation Information for Cut Varieties

Sowing

Germination temperature: 20-25°C / 68-77°F Days to emergence: 3-4 days (7-10 days under 15°C / 60°F conditions)

pH: 5.5-6.5

Growing

Growing temperature: above 15°C / 60°F at night and under 35°C / 95°F during the day Irrigation: Slightly drier conditions are preferable Fertilization: Provide sufficient fertilization to avoid yellowing of bottom leaves

Common Problems

Insects: Aphids, caterpillars, mites, slugs Diseases: Downy mildew, gray mold, leaf spot, powdery mildew, sclerotinia rot



isianthus(Eustoma)

F1 Corelli_{TM} series Flower Earliness Flower Size | Carlli* | Large

Eustoma grandiflorum

Light required 15-20°C/59-68°F 20-25 days

- Corelli has excellent large, double flowers with elegant fringed, curly petals
- Along with large flower buds it has an elegant yet playful appearance, and can create a classical ambience
- Top branching, superb for bouquet usage and excellent vase life







III Apricot FRS766





III Light Pink





II Light Pink



III Peach

III Rose

I White FRS881

II White







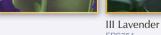


II Lavender



III Blue Imp.







F1 Corelli Sugoim series

Flower Earliness	Flower Size	
1, 111*	Large	* (

Eustoma grandiflorum

Light required 0 15-20°C/ 59-68°F 20-25 days

- New series from Corelli brand. "Sugoi" means "Wow!" "Awesome!" in Japanese
- As it's name "Sugoi", it has remarkable strong fringe and high number of petals with combination of extra large size flower
- This gorgeous flower provides great impact for bouquet
- Takii will fill this series with more colours in near future







I Light Lavender

III Yellow

Variety Comparison among Corelli

	Variety Name		r Size	Branching	Plant	Stem	Characteristic		
	variety iva	me		cm	inch	Branching	Height	Strength	Gharacteristic
	F1 Corelli	1	Pink	8.5	3.4	Normal	Medium	Normal	Large flower with green center.
	F1 Corelli	II	Light Pink	8.5	3.4	Good	Medium	Very Hard	Stable flower colour and thick petals.
	F1 Corelli	Ш	Apricot	8.5	3.4	Good	Tall	Hard	Highest number of petal and stable doubleness within Corelli series.
	F1 Corelli	Ш	Light Pink	8.5	3.4	Good	Very Tall	Normal	Fringe is less compared to other colours in this series.
	F1 Corelli	Ш	Peach	9.0	3.6	Good	Tall	Hard	Stable number of petals and fringe.
	F1 Corelli	Ш	Rose	8.0	3.2	Good	Tall	Very Hard	Thick petal with good transportability.
Double Flowered	F1 Corelli	Ţ	White	8.0	3.2	Very Good	Short	Normal	Stable flower shape. Pure white colour under low temperature condition.
with fringed	F1 Corelli	II	White	8.5	3.4	Good	Medium	Hard	Large flower with stable fringed flower petals.
	F1 Corelli	II	Lavender	8.5	3.4	Good	Short	Hard	Strong stable fringed flower. Deeper Lavender under cooler condition.
	F1 Corelli	Ш	Blue Imp.	8.0	3.2	Good	Tall	Normal	Stable flower shape with deeper blue colour (True Blue).
	F1 Corelli	Ш	Lavender	7-8	2.8-3.2	Good	Tall	Hard	Taller plant height, stronger stem within lavender colour varieties.
	F1 Corelli Sugoi	1	Light Lavender	8.0	3.2	Good	Short	Normal	Strongest fringed petal within Corelli series. Thick petals and high bumber of petals.
	F1 Corelli Sugoi	Ш	Yellow	8.0	3.2	Normal	Medium	Normal	Strong fringed and great number of petals. Great flowering uniformity.

The above data is based on trials completed in Japan. Actual results are dependent upon environmental conditions and local practices that may affect variety characteristics and performance. Short 60-70cm Medium 70-80cm Tall 80-110cm Very Tall over110cm

Germination Temperature Days to Emergence Stem Length

F1 Arena_{TM} series

Eustoma grandiflorum Light required 15-20°C/59-68°F 20-25 days

- ●Introducing new colours every year, the Arena series now totals 22 varieties, giving more choices for growers, florists and consumers
- Selected for its high quality and fully double flowers on strong and sturdy stems
- New Arena III White has very vigorous plant habit with extremely large flower
- Arena III Pink may have less doubleness under high temperature conditions during flower bud formation stage







III Apricot



III Baby Pink FRS674



III Champagne



III Clear Pink



III Hot Pink





















II Kilimanjaro



ll White





IV White



I Purple



II Purple Picotee



III Blue Picotee



III Purple

Variety Comparison among Arena

	Variety Name	Flowe	er Size	Branching	Plant	Stem	Characteristic
	variety Name	cm	inch	Branching	Height	Strength	Characteristic
	F1 Arena I Light Pink Imp.	8.0	3.2	Good	Short	Hard	More number of petals and eary flowering than Arena I Light Pin
	F1 Arena III Apricot	8.0	3.2	Good	Tall	Hard	Unique colour of flower
	F1 Arena III Baby Pink	8.0	3.2	Good	Medium	Hard	Wavy, thick petals with good transportability
	F1 Arena III Champagne	8.0	3.2	Good	Medium	Hard	Large flowers with many petals
	F1 Arena III Clear Pink	8.0	3.2	Good	Tall	Hard	Flower buds shape is like peony
	F1 Arena III Hot Pink	8.5	3.4	Good	Tall	Hard	Deep Pink. Stable doubleness under high temperature
	F1 Arena III Pink	8.0	3.2	Good	Tall	Hard	Bright pink under fluorescent light
	F1 Arena III Pink Flash	8.0	3.2	Good	Tall	Very Hard	Sturdy stem with high quality flower
	F1 Arena III Red	6.0	2.4	Good	Tall	Hard	Vivid red, Unusual colour for Eustoma
	F1 Arena IV Rose	7.0	2.8	Good	Very Tall	Very Hard	Suitable for season when it gets difficult to secure enough stem length
	F1 Arena III Gold	8.0	3.2	Good	Tall	Hard	High performance with its yellow gold flower
Double	F1 Arena III Green	7.5	3.0	Excellent	Medium	Hard	Nice thick flower petal, good sturdy stem
Flowered	F1 Arena I Pure White	8	3.2	Good	Medium	Hard	High stable doublenes. Very easy to grow
	F1 Arena I White	7.5	3	Good	Tall	Normal	Good flower shape and easy to get long stem
	F1 Arena II Kilimanjaro	8.0	3.2	Excellent	Tall	Very Hard	Abundant flower under strong sunlight
	F1 Arena II White	8.0	3.2	Good	Medium	Very Hard	Excellent flower shape, Strong stem
	F1 Arena III White	10	3.9	Less	Tall	Hard	Very vigorous growth with extremely large flower
	F1 Arena IV White	8.0	3.2	Good	Very Tall	Very Hard	Long stems suitable for cultivation under high temperatures and strong light intensity
	F1 Arena I Purple	8.5	3.4	Good	Medium	Hard	Easy to get long stem and good branching
	F1 Arena II Purple Picotee	8.0	3.2	Good	Medium	Normal	Picotee edge is vivid and stable
	F1 Arena III Blue Picotee	7.5	3.0	Good	Tall	Very Hard	Thick petal and top flowering type
	F1 Arena III Purple	7.0	2.8	Good	Medium	Hard	Curly, thick petals with deep purple colour

The above data is based on trials completed in Japan. Actual results are dependent upon environmental conditions and local practices that may affect variety characteristics and performance. Short 60-70cm Medium 70-80cm Tall 80-110cm Very Tall over110cm

F1 Croma_{TM} series

Middle

Eustoma grandiflorum

Light required 15-20°C/59-68°F 20-25 days

- Croma's thick, strong petals and extra-double flowers set it apart as a premium variety. Due to the strength of the flowers and stems, it is well suited for cold chain shipping
- Croma is attractive to florists with its versatility in arrangements along with its high consumer appeal
- IV Lavender Imp. is later flowering and with higher plant height than IV Lavender
- New Croma II Purple has deep purple colour with unique dark flower buds







III Blue Picotee Imp.



IV Lavender



III Blue Picotee





IV Lavender Imp.









III White







III Pink Picotee Imp.



III Yellow

Variety Comparison among Croma

Variaty Nama	Variety Name			Plant	Stem	Characteristic		
variety Name	cm	inch	Branching	Height	Strength	Gildiacteristic		
F1 Croma II Purple	6	2.4	Good	Short	Normal	Deep purple colour with unique flower buds		
F1 Croma III Blue Picotee	6.0	2.4	Excellent	Medium	Hard	Stable Picotee, high doubleness, top flowering		
F1 Croma III Blue Picotee Imp.	6.0	2.4	Good	Tall	Hard	Stable picotee under high temperature conditon		
F1 Croma IV Lavender	6.0	2.4	Excellent	Short	Very Hard	Late variety, Very hard stem		
F1 Croma IV Lavender Imp.	7.0	2.8	Excellent	Medium	Very Hard	Taller, larger flower than Croma IV Lavender		
F1 Croma III Silky White	7.0	2.8	Good	Medium	Hard	Pure white. More open flower shape compared to Croma III White		
F1 Croma III White	7.0	2.8	Good	Medium	Hard	Rosy flower, Excellent performance, Nice shape flower with good doubleness		
F1 Croma II Champagne	6.0	2.4	Good	Medium	Normal	Stable flower colour under cold condition		
F1 Croma III Pink Picotee Imp.	7.0	2.8	Good	Medium	Very Hard	Stable picotee even under cold condition		
F1 Croma III Yellow	6.0	2.4	Good	Tall	Hard	High doubleness		

The above data is based on trials completed in Japan. Actual results are dependent upon environmental conditions and local practices that may affect variety characteristics and performance.

F1 Jolly_{TM} III Pink

Eustoma grandiflorum Light required 15-20°C/ 59-68°F 20-25 days

- Plants produce an abundance of petite flowers with long vase life
- Very vigorous plant habit with very strong stem and flower petals

Variety Name Double Flowered Jolly III Pink		Flower Size cm inch Branching		Businelina	Plant	Stem	Characteristic
				Height	Strength	Characteristic	
		6.0	2.4	Excellent	Tall	Very Hard	Many flowers and vigorous plant habit



isianthus(Eustoma)

isianthus(Eustoma)

78

Flower Earliness Flower Size

F1 Super Magic_{TM} series Eustoma grandiflorum

Flower Earliness Flower Size

- Light required 15-18°C/59-64°F 20-25 days
- Super Magic is a double flowered mid-early series
- Top flowering habit with large sized flowers
- The wide colour assortment, including spectacular colours of Apricot and Champagne, provides a complete range for professional growers

, III, IV, according t	o earliness of flower	ing.	
1	Ш	III	IV
Early-Middle	Middle	Middle-Late	Late
Arena I	Arena II	Arena III	Arena IV
Corelli I	Croma II	Croma III	Croma IV
	Corelli II	Corelli III	
Super	Magic	Falda III	



Pure White



White FRS138 (Formerly FRSG79)



Yellow



Apricot



Champagne FRS131 (Formerly FRSG53)



Rose



Capri Blue Picotee



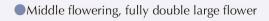
Deep Blue

FRS137 (Formerly FRSG72)

Deep Blue may have less do under high temperature comflower bud formation stage

F1 Advantage_{TM} series

Eustoma grandiflorum Light required 15-18°C/ 59-64°F 20-25 days



Thicker and stronger stems are more suitable for production under high temperature and long day











FRS116(Formerly FRSG44)

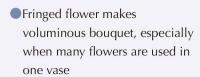
F1 Faldam series

Flower Earliness	Flower Size	
∼ *	Middle	* See page

Eustoma grandiflorum

Light required 15-20°C/59-68°F 20-25 days

- Gorgeous with its fringed single petals
- Abundant flowers on each stem
- Uniqueness attracts florists, driving new ideas for bouquet arrangements



Thick flower petals and sturdy stems are suitable for long transportation



II Light Apricot



II Salmon



III White

Variety Comparison among Falda

Variety Name		Flowe	er Size	Branching	Plant	Stem	Characteristic
		cm	inch	Branching	Height	Strength	Characteristic
Single	F1 Falda II Light Apricot	5.0	2.0	Good	Medium	Hard	Nice colour, Gorgeous in bouquet
Flowered	F1 Falda II Salmon	5.0	2.0	Good	Medium	Hard	Unique colour, Thick petal
	F1 Falda III White	5.0	2.0	Excellent	Tall	Hard	Pure white, Thick petal

The above data is based on trials completed in Japan. Actual results are dependent upon environmental conditions and local practices that

latthiola(Stock)

80

· Seedlings are selectable for doubleness

Glory_{TM} series

Dark required 18-21°C/ 64-70°F 4-5 days



- Glory series is an improvement over the Xmas series
- Uniform blooms are produced on straight and sturdy stems
- Doubles can be identified by cotyledon colour (See page 32)





Lavender









Xmas_{TM} series

Matthiola incana Dark required 18-21°C/64-70°F 4-5 days



- The non-branching gray-green leaved series produces a mass of blooms
- Xmas can be grown both in unheated glasshouses as well as outdoor field production
- Doubles can be identified by cotyledon colour (See page 32)









Rouge





Ruby FST134



White

• Average of 90% double-flowering type

Canneto White_{TM}

Matthiola incana

Dark required 18-21°C/64-70°F 4-5 days



- Early flowering
- Approximately 7 to 10 days later than Noble series
- Dense flower spike with sturdy stem
- Hairy-leaved type





Noble_{TM} series

Matthiola incana Dark required 18-21°C/64-70°F 4-5 days



- Extra-early flowering
- The full doubleness of Noble is breathtaking
- Closely arranged florets make a massive display on a sturdy stem
- Uniform growth makes Noble the grower's choice
- Hairy-leaved type





F1 Sunm series

Zinnia elegans



- This series produces masses of large, fully double flowers
- Sun series blooms 60-70 days after sowing





Sunshine Mix

Gold FZN641











Terms and Conditions of Sale

1. DELIVERY

Unless otherwise agreed in advance, seller will endeavour to deliver the goods by the way which seller deems to be best. The seller will not take responsibility for any delay or loss after the goods have left seller's warehouse or stock depot.

2. USE OF SEED

All the seed is sold for the purpose of horticultural and/or agricultural crop only. It is expressly forbidden to use the seeds for multiplication or reproduction purposes.

No responsibility whatsoever, will be accepted for any seeds reproduced.

3. DELIVERY DUTY

Advanced orders for the seeds where seed crops have not yet been received by the seller are booked subject to the restriction of an average yield of standard germinating seeds and quality standards. Should the yield be lower than average, the seller has the right to deliver pro rata or will be dismissed from his delivery duty in case of total crop failure.

4. PROPERTY RIGHT

The seller remains an owner of the goods until the time full payment has been made.

5. COMPLAINTS

Any clams for quantity and appearance of seeds shall be submitted within 6 working days from the receipt of the seeds.

Any claims for the contents of invoice shall be submitted within 6 working days from the receipt of the seeds.

Any claims for germination and physical purity have to be submitted within 30 days from the receipt of the seeds.

Complaints about varietal purity of the seeds supplied must be made as soon as possible, in any case, at the point of time that the crop can still be examined in the field by both parties.

No complaint can be considered unless clear proof can be given that the seed grown and alleged to have performed unsatisfactory was in fact the seed supplied by the seller and that it was sown on suitably prepared ground, including soil and any type of growing medium, treated carefully and correctly throughout and subject only to such conditions as were likely to produce a favorable crop.

6. NON PAYMENT

The seller reserves the right to withhold deliveries until all and any outstanding payments have been received and reserve a lien upon and the right to sell or otherwise dispose of all the goods for which payments have not been made.

If the buyer does not make full payment within a period agreed upon, an interest is charged at 1.5% per month.

7. SOLVENCY

Condition for the delivery duty is that the buyer has an unconditional solvency. If the seller receives before shipment, any information from a bank, credit office or any other reliable source which leads the seller to believe the buyer's solvency is at risk, the seller has the right to demand security for payment or to cancel the shipment.

8. LATENT DEFECT

Diseases of plants can be transmitted by the wind, insects, animals or by humans and may be seed borne or soil borne. It is not a condition of sale nor do we warrant that any seed sold by the seller shall be free from such a deficiency and the seller will not be responsible in any way for the resultant crop.

9. FORCE MAJEURE

The seller shall not be responsible for any delay of goods or any part thereof, caused by any act of God, action by any government, strike, lockout, combination of workers, riot or civil commotion, breakdown of machinery, power failure, fire, crop failures grown by the seller or on the seller's behalf and/or any other contingency beyond the control of the seller.

10. INSURANCE

Unless otherwise agreed upon in advance, the seller will insure the goods, at the cost of the buyer, for the damage in the transportation under the seller's open

11. PRODUCT DESCRIPTIONS

Descriptions, illustrations and/or photographs shown in catalogues, leaflets and/or any other documents are based upon the results obtained under favorable conditions. Identical results are not guaranteed nor implied for all growing conditions.

12. DISEASE AND/OR PEST RESISTANCE

Resistance and susceptibility claimed by the seller in the descriptions of the varieties are based upon the results obtained under conditions and with strains (races) of pathogens available in Japan. The seller does not guarantee identical results when the seeds are grown under different conditions.

13. OTHER CONDITIONS

Conditions not stipulated in the terms and conditions of sale are subject to the International Seed Federation (ISF) Rules and Usages for the Trade in Seeds for Sowing

Limitation of Liability

All seeds we sell are properly cleaned, dried and graded up to our international standard, and the germination and purity are tested at our laboratory before the shipment. and data of the test will be furnished when so asked.

However, in view of the nature of merchandise and in accordance with universal custom of the seed trade, WE HAVE NO WARRANTY OF MERCHANTABILITY, FITNESS FOR PURPOSE OR OTHER WARRANTY, EXPRESS OR IMPLIED.

No claim or liability shall be asserted unless the buyer or user shall have reported within a reasonable period as stipulated in clause-5 "Complaints" of terms and conditions of sale.

OUR LIABILITY IS LIMITED IN AMOUNT TO THE PURCHASE PRICE OF THE SEEDS. WHETHER ARISING FROM CONTRACT, NEGLIGENCE, WARRANTY, OR ANY OTHER CAUSE.

WE SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES.

