

## **APPLICATIONS UNDER EXAMINATION**

GAILLARDIA (Gaillardia aristata)

Proposed denomination:	'Granbur'
Trade name:	Sunburst Burgundy Silk
Application number:	07-6016
Application date:	2006/10/13 (priority claimed)
Applicant:	Syngenta Crop Protection AG, Basel, Switzerland
Agent in Canada:	Brenda Cole, BioFlora Inc., St. Thomas, Ontario
Breeder:	M. Gutter, Enkhuizen, The Netherlands

Variety used for comparison: 'Burgundy'

**Summary:** 'Granbur' has a more compact growth habit and shorter plant height than 'Burgundy'. 'Granbur' has a shorter peduncle length and larger flower diameter than 'Burgundy'. 'Granbur' has absent to very weak anthocyanin colouration on the sepal while 'Burgundy' has strong anthocyanin on the margin of the sepal. The upper side of the ray floret is dark purple red for 'Granbur' while it is red with yellow orange secondary colour at the tips for 'Burgundy'.

### **Description:**

PLANT: bushy-rounded growth habit, dense branching

STEM: medium green, weak anthocyanin colouration, dense pubescence, medium thickness, rounded to slightly ribbed

LEAF: alternate arrangement, simple, oblanceolate, acute apex, attenuate base, margins entire to dentate, very dense pubescence on upper and lower side, medium green on upper and lower side, no variegation, no petiole

PEDUNCLE: very weak to weak anthocyanin colouration, dense pubescence

FLOWER: head type, terminal position, erect attitude

RAY FLORET: fan shaped, entire margin, 2-3 small to medium lobes at apex, dark purple red on upper side, dark purple red on lower side with red pink between veins

DISC: outer florets brown green before anther dehiscence, inner florets yellow before anther dehiscence

**Origin and Breeding:** 'Granbur' was bred and developed through inbred breeding of the *Gaillardia aristata* variety 'Burgundy'. The breeder conducted 3 cycles of half-sib selections of the variety 'Burgundy' made during the period from August 2000 through to July 2002, in Enkhuizen, The Netherlands. The seeds from the selection were sown in January 2003 and a single seedling was selected in July 2003. The selection criteria included compact plant habit, good branching characteristics and early flowering. Asexual reproduction by cuttings was first conducted in August 2003 in Enkhuizen, The Netherlands.

**Tests and Trials:** Trials for 'Granbur' were conducted during the summer of 2008 in a polyhouse at BioFlora Inc. in St. Thomas, Ontario. There were 15 plants each of the candidate and reference variety. The plants were grown from rooted cuttings which were transplanted into 1 gallon pots on April 17, 2008. Observations and measurements were taken from 10 plants on June 26, 2008. All colour determinations were made using the 2001 Royal Horticulture Society (RHS) Colour Chart.

#### Comparison table for 'Granbur'

	'Granbur'	'Burgundy'*
Plant height (cm) mean	17.9	51.4
std. deviation	4.36	4.16



Peduncle length (cm) mean std. deviation	9.4 1.07	17.5 2.07
<i>Flower diameter (cm)</i> mean std. deviation	8.0 0.37	7.1 0.12
Colour of ray floret (RHS) upper side - primary upper side - secondary lower side	53B with 53A veins N/A 53A-B, 51C between veins	46B with 46A veins 14A at tips 34D
*reference variety		



Gaillardia: 'Granbur' (left) with reference variety 'Burgundy' (right)



Gaillardia: 'Granbur' (left) with reference variety 'Burgundy' (right)



Proposed denomination:	'Granoran'
Trade name:	Sunburst Tangerine
Application number:	07-6017
Application date:	2006/10/13 (priority claimed)
Applicant:	Syngenta Crop Protection AG, Basel, Switzerland
Agent in Canada:	Brenda Cole, BioFlora Inc., St. Thomas, Ontario
Breeder:	M. Gutter, Enkhuizen, The Netherlands

Varieties used for comparison: 'Granyel' (Sunburst Yellow) and 'Yellow Goblin'

**Summary:** 'Granoran' has a shorter plant height and a more compact growth habit than 'Yellow Goblin'. 'Granoran' has a larger leaf size than the reference varieties. 'Granoran' has a shorter peduncle length than 'Yellow Goblin'. 'Granoran' has a larger flower diameter than 'Granyel' and a smaller flower diameter than 'Yellow Goblin'. 'Granoran' has slightly darker yellow orange colour on the upper side of the ray florets than the reference varieties. 'Granoran' has orange brown outer disc florets while the reference varieties have yellow orange outer disc florets.

## **Description:**

PLANT: bushy-rounded, dense branching

STEM: medium green, very weak anthocyanin colouration, dense pubescence, medium thickness, rounded to slightly ribbed

LEAF: alternate arrangement, simple, oblanceolate, acute apex, attenuate base, entire to dentate-serrate margin, very dense pubescence on upper and lower side, medium green on upper and lower side, no variegation, no petiole

PEDUNCLE: very weak anthocyanin colouration, dense pubescence

FLOWER: head type, terminal in position, erect attitude

RAY FLORET: fan shaped, entire margin, 2-3 small to medium lobes at apex, yellow orange on upper and lower side DISC: outer florets orange brown before anther dehiscence, inner florets yellow orange before anther dehiscence

**Origin and Breeding:** 'Granoran' was bred and developed through inbred breeding of the *Gaillardia aristata* variety 'Orange'. The breeder conducted 3 cycles of half-sib selections of the variety 'Orange' during the period from August 2000 through to July 2002, in Enkhuizen, The Netherlands. The seeds from the selection were sown in January 2003 and a single seedling was selected in July 2003. The selection criteria included compact plant habit, good branching characteristics and early flowering. Asexual reproduction by cuttings was first conducted in August 2003 in Enkhuizen, The Netherlands.

**Tests and Trials:** Trials for 'Granoran' were conducted during the summer of 2008 in a polyhouse at BioFlora Inc. in St. Thomas, Ontario. There were 15 plants each of the candidate and reference varieties. The plants were grown from rooted cuttings which were transplanted into 1 gallon pots on April 17, 2008. Observations and measurements were taken from 10 plants on June 26, 2008. All colour determinations were made using the 2001 Royal Horticulture Society (RHS) Colour Chart.

Comparison table for 'Granoran'		
'Granoran'	'Granyel'*	'Yellow Goblin'*
29.5	29.2	55.1
1.18	1.75	1.37
9.7	6.1	7.9
0.55	0.76	0.92
3.0	1.6	1.7
0.49	0.11	0.19
15.0	14.0	21.1
2.37	1.20	1.45
	<b>'Granoran'</b> 29.5 1.18 9.7 0.55 3.0 0.49 15.0	'Granoran' 'Granyel'*   29.5 29.2   1.18 1.75   9.7 6.1   0.55 0.76   3.0 1.6   0.49 0.11   15.0 14.0

## **APPLICATIONS UNDER EXAMINATION**

Flower diameter (cm)			
mean	7.0	6.0	7.8
std. deviation	0.41	0.42	0.43
Colour of ray floret (R	HS)		
upper side	17A, 16A at base	14B, 14C at base	14A, 14B at base
lower side	13A, 16C at base	13A-B	13A-B
Colour of disc florets	(RHS)		
outer florets	34B-C	17A-B	17A
*reference varieties			



Gaillardia: 'Granoran' (left) with reference variety 'Yellow Goblin' (right)



Proposed denomination:	'Granyel'
Trade name:	Sunburst Yellow
Application number:	07-6018
Application date:	2006/10/13 (priority claimed)
Applicant:	Syngenta Crop Protection AG, Basel, Switzerland
Agent in Canada:	Brenda Cole, BioFlora Inc., St. Thomas, Ontario
Breeder:	M. Gutter, Enkhuizen, The Netherlands

Varieties used for comparison: 'Granoran' (Sunburst Tangerine) and 'Yellow Goblin'

**Summary:** 'Granyel' has a shorter plant height and more compact growth habit than 'Yellow Goblin'. 'Granyel' has a smaller leaf size than the reference varieties. 'Granyel' has a shorter peduncle length than 'Yellow Goblin'. 'Granyel' has a smaller flower diameter than the reference varieties. 'Granyel' has lighter yellow orange ray floret colour than 'Granoran' and differs in the colour of the outer disc florets from 'Granoran'.

### **Description:**

PLANT: bushy-rounded, dense branching

STEM: medium green, very weak anthocyanin colouration, dense pubescence, medium thickness, rounded to slightly ribbed

LEAF: alternate arrangement, simple, oblanceolate, acute apex, attenuate base, entire to dentate-serrate margin, very dense pubescence on upper and lower side, medium green on upper and lower side, no variegation, no petiole

PEDUNCLE: very weak anthocyanin colouration, dense pubescence

FLOWER: head type, terminal in position, erect attitude

RAY FLORET: fan shaped, entire margin, 2-4 small to medium lobes at apex, yellow orange on upper and lower side DISC: florets yellow orange before anther dehiscence

## APPLICATIONS UNDER EXAMINATION

**Origin and Breeding:** 'Granyel' was bred and developed through inbred breeding of the *Gaillardia aristata* variety 'Burgundy'. The breeder conducted 3 cycles of half-sib selections of the variety 'Burgundy' during the period from August 1999 through to July 2001, in Enkhuizen, The Netherlands. The seeds from the selection were sown in January 2002 and a single seedling was selected in July 2002. The selection criteria included compact plant habit, good branching characteristics and early flowering. Asexual reproduction by cuttings was first conducted in August 2002 in Enkhuizen, The Netherlands.

**Tests and Trials:** Trials for 'Granyel' were conducted during the summer of 2008 in a polyhouse at BioFlora Inc. in St. Thomas, Ontario. There were 15 plants each of the candidate and reference varieties. The plants were grown from rooted cuttings which were transplanted into 1 gallon pots on April 17, 2008. Observations and measurements were taken from 10 plants on June 26, 2008. All colour determinations were made using the 2001 Royal Horticulture Society (RHS) Colour Chart.

Comparison table	'Granyel'	'Granoran'*	'Yellow Goblin'*
Plant height (cm)			
mean	29.2	29.5	55.1
std. deviation	1.75	1.18	1.37
Leaf length (cm)			
mean	6.1	9.7	7.9
std. deviation	0.76	0.55	0.92
Leaf width (cm)			
mean	1.6	3.0	1.7
std. deviation	0.11	0.49	0.19
Peduncle length (crr	ר)		
mean	14.0	15.0	21.1
std. deviation	1.20	2.37	1.45
Flower diameter (cn	1)		
mean	6.0	7.0	7.8
std. deviation	0.42	0.41	0.43
Colour of ray floret (	(RHS)		
upper side	14B, 14C at base	17A, 16A at base	14A, 14B at base
lower side	13A-B	13A, 16C at base	13A-B
Colour of disc florets	s (RHS)		
outer florets	17A-B	34B-C	17A
	in B	018 0	117
*reference varieties			

# Comparison table for 'Granyel'

