



Government of Pakistan
PBRR, Pakistan

Plant Breeders' Rights Registry

Plant Breeders' Rights Journal



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Ministry of National Food Security and Research
Government of Pakistan**

Plant Breeders' Rights Registry G-9/4,
Mauve Area, Islamabad, Pakistan

CONTENTS

Sr. No.	TITLE	PAGE No.
1	Cases for Opposition	1
2	News and Events	47

CASES FOR OPPOSITION

1. Application No.: PBRR-Cot-03/21

Name of the applicant: Four Brother Group, Pakistan

Institute: Four Brother Group, Pakistan

Name of Breeder(s):

- i. Ch. Muhammad Hanif
- ii. Shujaat Ullah Malik

Name of Co-breeder(s):

Application for: New Plant Variety

Denomination of variety: Eagle-2

Crop: Cotton (*Gossypium hirsutum* L.)

Type of the variety: OPV

Name of initial variety
(in case EDV): Not Applicable

Salient features:

CHARACTERISTICS	DESCRIPTION
Variety compared	Tarzan-I. FH-142 & MNH-886
Area adaptation	Whole Cotton growing area of Pakistan
Variety origin	Local cross
Maturity	Medium early
Days to open 50% boll	1-10 days
Seedling characters	
Seedling color	Green
Foliage spot	Present
Plant characters	
Growth habit	Semi erect
Plant height	155-160 cm
Fruiting branch type	Short sympodia branches length
Nodes to 1st. Monopodia	7.4 (6-10)

Monopodia/ plant	0-4
Nodes to 1st. Sympodia	7.7 (6-10)
Sympodial length	Short
Stem tip hair	Profuse
Leaf characters	
Foliage density	Medium
Leaf color	Dark Green
Leaf length	12.8 cm
Leaf width	20.3 cm
Petiole length	12.07 cm
Leaf nectaries	Present
Leaf hairiness	Profuse
Flowers characters	
Days to first flowering	40-45 days
Flowering duration	Medium
Stamen density	Medium
Stigma exertion	Protruded (3.5 mm)
Stigma height	2.31 cm (2.1 -2.9 cm)
Calyx size	Medium
Flower size	Medium
Petal spot	Absent
Nectaries	Present
Pollen color	Yellow
Boll characteristics	
Boll shape	Oblong
Boll size	Big
Beak size	Big
Boll broad at	Middle
Boll opening	Good
Boll weight (maximum)	4.77 gm
Exploited Yield kg/ha	5239 Kg

Seed characteristics	
Seed size	Bold
Seed index	9.12 g
Seed coat color	Brownish black
Seed fuzz	Fuzzy
Fuzz color	Dusky white
Fiber characters	
Fiber color	Shiny white
G.o.t %	41.40%
Staple length	28.20 – 29 mm
Mircronaire value	4.44ug/inch
Strength	31.9G/Tax (97.7-100 tpsi)
Lint index	5.78
Uniformity ratio	47.8
Resistance	
Lodging	No lodging
Sucking pests	Highly tolerant
Boll worms	Resistant
Virus	Tolerant
Variant	A few plants with medium sympodial length
Distinguishing characteristics: Big boll, compact plant	

Opposition can be filed up to: 22-08-2024

2. Application No.: PBRR-Cot-05/21

Name of the applicant: Four Brother Group, Pakistan

Institute: Four Brother Group, Pakistan

Name of Breeder(s):

- i. Ch. Muhammad Hanif
- ii. Shujaat Ullah Malik

Name of Co-breeder(s):

Application for: New Plant Variety

Denomination of variety: Hatf-3

Crop: Cotton (*Gossypium hirsutum* L.)

Type of the variety: OPV

Name of initial variety
(in case EDV): Not Applicable

Salient features:

CHARACTERISTICS	DESCRIPTION
Maturity	Medium early
Days to open 50% boll	1-10 days
Seedling characters	
Seedling color	Green
Foliage spot	Present
Plant characters	
Growth habit	Semi erect
Plant height	155-160 cm
Fruiting branch	Medium long
Monopodial attitude	Semi erect
Sympodial attitude	Semi erect
Nodes to 1st. Monopodia	7.7 (6-10)
Monopodia/plant	0-3
Nodes to 1st. Sympodia	8.7 (7-11)
Sympodial length	Short
Sympodia/plant	27.5 (24-32)
Stigma pigmentation	Normal
Stem tip hair	Profuse
Bud gossypol	Normal
Leaf characters	
Foliage density	Medium
Leaf color	Green
Leaf length	12.8 cm

Leaf width	20.3 cm
Petiole length	12.7 cm
Leaf attitude	Semi erect
Leaf type	Normal
Leaf nectaries	Present
Leaf hairiness	Profuse
Flowers characters	
Days to First flowering	40- 45 days
Flowering duration	Medium
Flower size	Medium
Petal spot	Absent
Nectaries	Present
Petal color	Creamy
Pollen color	Yellow
Stigmaa exertion	Protruded (3.2 mm)
Stigma height	2.3 1cm (2.1-2.9 cm)
Calyx size	Medium
Boll characteristics	
Boll shape	Oblong
Boll size	Big
Beak size	Medium
Boll broad at	Middle
Boll surface	Pitted
Gossypol	Normal
Boll opening	Good
Boll weight (maximum)	4.5 g
Exploited Yield kg/hac	4945
Seed characteristics	
Seed size	Medium
Seed index	8.1 g
Seed coat color	Brownish black

Seed fuzz	Fuzzy
Fuzz color	Dusky white
Oil contents	20%
Fiber characters	
Fibre color	Shiny white
Got%	41.80%
Staple length	29.7 mm
Mircronaire value	4.55 ug/inch
Fibre strength	99.6-100 tppsi
Lint index	5.78
Uniformity ratio	49.80%
Fibre Length group	Long
Resistance	
Glyphosate	Resistant and easy to control all weeds
Lodging	No lodging
Sucking pests	Highly tolerant
Boll worms	Resistant
Virus	Tolerant
Variant	A few plants with medium sympodial length
Distinguishing characteristics: Stout Stem, Bushy, sympodial plant	

Opposition can be filed up to: 22-08-2024

3. Application No.: PBRR-Maize-68/22

Name of the applicant: Mohsin Raza

Institute: Rawal Seed Corporation KLP Road, Sadiqabad

Name of Breeder(s):

i. Mohsin Raza

Name of Co-breeder(s):

Application for: New Plant Variety

Denomination of variety: MSCPL-48

Crop: Maize (*Zea mays* L.)

Type of the variety: OPV

Name of initial variety
(in case EDV): Not Applicable

Salient features:

CHARACTERISTICS	DESCRIPTION
Maturity duration	Long
Sowing time	Mid January to mid February
Seedling characteristics	
Seedling length	2.5 cm
Coleoptile's anthocyanin	Absent
First leaf colour	Green
First leaf tip	Pointed
First leaf length	35 mm
First leaf width	10-15 mm
Plant characteristics for inbred lines only	
Plant length up to flag leaf	Long
Stem characteristics	
Stem length	130-135 cm
Internodal length	12 cm
Internodal diameter	4 cm
Mid node anthocyanin	Absent
Stem tillering	Absent
Stem anthocyanin coloration of brace roots	Present
Leaf characteristics	
Leaf angle between blade and stem (on leaf just above upper ear)	Small
Leaf attitude of blade (on leaf just above upper ear)	Drooping
Leaf width of blade (leaf of upper ear)	Medium
Tassel characteristics	
50% tassel emergence (days)	90-92

50% tassel emergence (days)	Late
Anthocyanin coloration at the base of glume (in middle third of main axis)	Absent
Anthocyanin coloration of glume excluding base (in middle third of main axis)	Present
Angle between main axis and lateral branches	Wide
Attitude of lateral branches (in lower third of tassel)	Curved
Anthocyanin coloration of anthers (in middle third of main axis on fresh anthers)	Absent
Density of spikelets (in middle third of tassel)	Dense
Tassel angle between main axis and lateral branches	Wide
Tassel length	28 cm
Tassel stalk length	29 cm
Exertion above flag leaf	5 cm
No. of lateral branches	17-19
Lateral branches density	Semi dense
Flower characteristics	
Anther fertility	Normal
Pollen shading	Heavy
Anther color	Green
Pollen color	Yellow
Glume color	Pink
Ear characteristics	
50% silk emergence(days)	95-97
Silk color	Pink
Insertion height	75-80 cm
Peduncle length	3.5-4 cm
Ear leaf extensions	Absent
Ear husk length	Long
No. of husk blades	7
Ear shape	Conical
Ear length	15-16 cm

Ear diameter	4 cm
Seed rows/ear	14
Seed/row	30
Seed row arrangement	Straight
No. of ears/plant	1-2
Cob color	White
Seed characteristics	
Seed color	Orange
Seed tip color	White
Color of sides	Orange
Seed shape	Toothed
Seed length	8 mm
Seed width	6 mm
Seed thickness	3.8 mm
Seed type	Flint
Seed wax	Absent
Seed size	Bold
Seed weight/ear (g)	56
1000 seed weight (g)	145
Grain. Cob ratio	78.7%
Seed sweetness	Absent
Seed waxiness	Absent
Seed opaqueness	Present
Environmental adaptability:	
Flowering response to seasons	Variable
Drought tolerance	Medium
Tolerance to salinity	Medium
Tolerance to acid soil	Medium
Cold tolerance	Medium
Heat tolerance	Medium

Opposition can be filed up to: 22-08-2024

4. Application No.: PBRR-Maize-69/22

Name of the applicant: Mohsin Raza

Institute: Rawal Seed Corporation KLP Road, Sadiqabad

Name of Breeder(s):

i. Mohsin Raza

Name of Co-breeder(s):

Application for: New Plant Variety

Denomination of variety: MSCPL-117

Crop: Maize (*Zea mays*)

Type of the variety: OPV

Name of initial variety
(in case EDV): Not Applicable

Salient features:

CHARACTERISTICS	DESCRIPTION
Maturity duration	Medium
Sowing time	Mid January to mid February
Seedling characteristics	
Seedling length	4 cm
Coleoptile's anthocyanin	Weak
First leaf colour	Other
First leaf tip	Pointed
First leaf length	30 mm
First leaf width	18 mm
Plant characteristics for inbred lines only	
Plant length up to flag leaf	Long
Stem characteristics	
Stem length	180-185 cm
Internodal length	16 cm
Internodal diameter	3 cm

Mid node anthocyanin	Absent
Stem tillering	Absent
Stem anthocyanin coloration of brace roots	Present
Leaf characteristics	
Leaf angle between blade and stem (on leaf just above upper ear)	Small
Leaf attitude of blade (on leaf just above upper ear)	Straight
Leaf width of blade (leaf of upper ear)	Narrow
Tassel characteristics	
50% tassel emergence (days)	80-85
50% tassel emergence (days)	Late
Anthocyanin coloration at the base of glume (in middle third of main axis)	Absent
Anthocyanin coloration of glume excluding base (in middle third of main axis)	Absent
Angle between main axis and lateral branches	Wide
Attitude of lateral branches (in lower third of tassel)	Strongly curved irregular
Anthocyanin coloration of anthers (in middle third of main axis on fresh anthers)	Absent
Density of spikelets (in middle third of tassel)	Sparse
Tassel angle between main axis and lateral branches	Wide
Tassel length	40 cm
Tassel stalk length	46-47 cm
Exertion above flag leaf	6-7 cm
No. of lateral branches	14
Lateral branches density	Lax
Flower characteristics	
Anther fertility	Normal
Pollen shading	Heavy
Anther color	Creamy
Pollen color	Yellow
Glume color	Green
Ear characteristics	

50% silk emergence(days)	88-90
Silk color	Pink
Insertion height	90-95 cm
Peduncle length	5 cm
Ear leaf extensions	Absent
Ear husk length	Medium
No. of husk blades	7
Ear shape	Cylindrical
Ear length	20 cm
Ear diameter	5 cm
Seed rows/ear	16
Seed/row	38
Seed row arrangement	Straight
No. of ears/plant	1-2
Cob color	Pink
Seed characteristics	
Seed color	Yellow
Seed tip color	White
Color of sides	Yellow
Seed shape	Toothed
Seed length	12 mm
Seed width	6 mm
Seed thickness	4.5 mm
Seed type	Semi dent
Seed wax	Absent
Seed size	Medium
Seed weight/ear (g)	112
1000 seed weight (g)	225
Grain. Cob ratio	85.2%
Seed sweetness	Absent
Seed waxiness	Absent

Seed opaqueness	Present
Pith color	Red
Environmental adaptability:	
Flowering response to seasons	Variable
Drought tolerance	Medium
Tolerance to salinity	Medium
Tolerance to acid soil	Medium
Cold tolerance	Medium
Heat tolerance	Medium

Opposition can be filed up to: 22-08-2024

5. Application No.: PBRR-Maize-70/22

Name of the applicant: Mohsin Raza

Institute: Rawal Seed Corporation, Sadiqabad

Name of Breeder(s):

i. Mohsin Raza

Name of Co-breeder(s):

Application for: New Plant Variety

Denomination of variety: PHSC-12

Crop: Maize (*Zea mays* L.)

Type of the variety: OPV

Name of initial variety
(in case EDV): Not Applicable

Salient features:

CHARACTERISTICS	DESCRIPTION
Maturity duration	Long
Sowing time	Mid July to mid August
Seedling characteristics	
Seedling length	2-2.5 cm
Coleoptile's anthocyanin	Medium

First leaf colour	Other
First leaf tip	Pointed
First leaf length	6-7 mm
First leaf width	1.5 mm
Stem characteristics	
Stem length	136-140 cm
Internodal length	8 cm
Internodal diameter	4 cm
Mid node anthocyanin	Present
Stem tillering	Absent
Stem anthocyanin coloration of brace roots	Present
Leaf characteristics	
Leaf angle between blade and stem (on leaf just above upper ear)	Small
Leaf attitude of blade (on leaf just above upper ear)	Straight
Leaf width of blade (leaf of upper ear)	Medium
Tassel characteristics	
50% tassel emergence (days)	60-65
50% tassel emergence (days)	Late
Anthocyanin coloration at the base of glume (in middle third of main axis)	Absent
Anthocyanin coloration of glume excluding base (in middle third of main axis)	Present
Angle between main axis and lateral branches	Narrow
Attitude of lateral branches (in lower third of tassel)	Straight
Anthocyanin coloration of anthers (in middle third of main axis on fresh anthers)	Present
Density of spikelets (in middle third of tassel)	Dence
Tassel angle between main axis and lateral branches	Narrow
Tassel length	31 cm
Tassel stalk length	24 cm
Exertion above flag leaf	7 cm
No. of lateral branches	8-9

Lateral branches density	Dense
Flower characteristics	
Anther fertility	Normal
Pollen shading	Heavy
Anther color	Purple
Pollen color	Yellow
Glume color	Purple
Ear characteristics	
50% silk emergence(days)	68-70
Silk color	Purple
Insertion height	55-60 cm
Peduncle length	4-5 cm
Ear leaf extensions	Absent
Ear husk length	Medium
No. of husk blades	10
Ear shape	Conical
Ear length	20-22 cm
Ear diameter	6 cm
Seed rows/ear	12
Seed/row	28
Seed row arrangement	Straight
No. of ears/plant	1-2
Cob color	White
Seed characteristics	
Seed color	Redish
Seed tip color	White
Color of sides	Redish
Seed shape	Toothed
Seed length	8.7 mm
Seed width	6.0 mm
Seed thickness	3.9 mm

Seed type	Flint
Seed wax	Absent
Seed size	Medium
Seed weight/ear (g)	61
1000 seed weight (g)	232
Grain. Cob ratio	81.0%
Seed sweetness	Absent
Seed waxiness	Absent
Seed opaqueness	Present
Environmental adaptability:	
Flowering response to seasons	Variable
Drought tolerance	Medium
Tolerance to salinity	Medium
Tolerance to acid soil	Medium
Cold tolerance	Medium
Heat tolerance	Medium

Opposition can be filed up to: 22-08-2024

6. Application No.: PBRR-Maize-71/22

Name of the applicant: Mohsin Raza

Institute: Rawal Seed Corporation, Sadiqbqad

Name of Breeder(s):

i. Mohsin Raza

Name of Co-breeder(s):

Application for: New Plant Variety

Denomination of variety: PHSC-226

Crop: Maize (*Zea mays* L.)

Type of the variety: OPV

Name of initial variety
(in case EDV):

Not Applicable

Salient features:

CHARACTERISTICS	DESCRIPTION
Maturity duration	Long
Sowing time	Mid July to mid August
Seedling characteristics	
Seedling length	3.5 cm
Coleoptile's anthocyanin	Absent
First leaf colour	Green
First leaf tip	Pointed
First leaf length	50 mm
First leaf width	20 mm
Plant characteristics for inbred lines only	
Plant length up to flag leaf	Long
Stem characteristics	
Stem length	160-165 cm
Internodal length	10 cm
Internodal diameter	3.5 cm
Mid node anthocyanin	Absent
Stem tillering	Absent
Stem anthocyanin coloration of brace roots	Absent
Leaf characteristics	
Leaf angle between blade and stem (on leaf just above upper ear)	Small
Leaf attitude of blade (on leaf just above upper ear)	Drooping
Leaf width of blade (leaf of upper ear)	Narrow
Tassel characteristics	
50% tassel emergence (days)	55-60
50% tassel emergence (days)	Late
Anthocyanin coloration at the base of glume (in middle third of main axis)	Absent
Anthocyanin coloration of glume excluding base (in middle third of main axis)	Absent

Angle between main axis and lateral branches	Wide
Attitude of lateral branches (in lower third of tassel)	Curved
Anthocyanin coloration of anthers (in middle third of main axis on fresh anthers)	Absent
Density of spikelets (in middle third of tassel)	Sparse
Tassel angle between main axis and lateral branches	Wide
Tassel length	30 cm
Tassel stalk length	33-34 cm
Exertion above flag leaf	4 cm
No. of lateral branches	9-10
Lateral branches density	Semi dense
Flower characteristics	
Anther fertility	Normal
Pollen shading	Heavy
Anther color	Creamy
Pollen color	Yellow
Glume color	Yellow
Ear characteristics	
50% silk emergence(days)	57-62
Silk color	Yellow
Insertion height	50-55 cm
Peduncle length	3 cm
Ear leaf extensions	Absent
Ear husk length	Long
No. of husk blades	9-10
Ear shape	Conical
Ear length	20-22 cm
Ear diameter	4 cm
Seed rows/ear	14
Seed/row	28
Seed row arrangement	Spiral

No. of ears/plant	1-2
Cob color	White
Seed characteristics	
Seed color	Yellow
Seed tip color	White
Color of sides	Yellow
Seed shape	Toothed
Seed length	9 mm
Seed width	6.5 mm
Seed thickness	4.0 mm
Seed type	Flint
Seed wax	Absent
Seed size	Medium
Seed weight/ear (g)	91
1000 seed weight (g)	335
Grain. Cob ratio	81%
Seed sweetness	Absent
Seed waxiness	Absent
Seed opaqueness	Present
Environmental adaptability:	
Flowering response to seasons	Variable
Drought tolerance	Medium
Tolerance to salinity	Medium
Tolerance to acid soil	Medium
Cold tolerance	Medium
Heat tolerance	Medium

Opposition can be filed up to: 22-08-2024

7. Application No.: PBRR-Wheat-73/22

Name of the applicant: Wheat Research Institute, Faisalabad

Institute: Wheat Research Institute, Faisalabad

Name of Breeder(s):

- i. Dr. Javed Ahmad
- ii. Dr. Aziz-ur-Rehman
- iii. Dr. Nadeem Ahmad
- iv. Muhammad Zulkiffal
- v. Muhammad Hammad Tanveer
- vi. Majid Nadeem

Name of Co-breeder(s):

Application for: New Plant Variety

Denomination of variety: Arooj-22

Crop: Wheat (*Triticum aestivum* L.)

Type of the variety: OPV

Name of initial variety
(in case EDV): Not Applicable

Salient features:

CHARACTERISTICS	DESCRIPTION
Maturity duration	Medium
Seedling characteristics	
Growth habit	Semi erect
Coleoptile color	White
Seedling anthocyanin	Absent
Plant characteristics	
Plant height	114 cm
Color booting stage	Pale green
Stem characteristics	
Stem anthocyanin	Absent
Stem waxy bloom	Medium

Stem wall thickness	Thin
Stem stiffness	Intermediate
Stem diameter	4 mm
Peduncle length	38 cm
Productive tillers/m	132
Nodes/stem	4
Straw color	Yellowish white
Lodging	Medium
Flag leaf characteristics	
Flag leaf attitude	Semi erect
Flag leaf twist	Weak
Length	27 cm
Width	1.96 cm
Sheath wax	Medium
Sheath hairiness	Absent
Auricle hairiness	Medium
Auricle anthocyanin	Absent
Ear characteristics	
Ear emergence	93
Ear size	Medium
Length	10.5 cm
Width	1 cm
Wax at anthesis	Medium
Color at maturity	Yellowish white
Ear shape	Tapering
Ear density	Medium dense
Super numerary spikelets	Absent
Speltoids	Absent
Shattering	Resistant
Ear kink/twist	Weak
Ear awnedness	Awned

Awn distribution	Whole
Awn length	Medium
Awn color	Yellowish White
Awn habit	Erect
Anther color	Yellow
Rachis hairs apical	Absent
Rachis hairs margin	Absent
Rachis length	10 cm
Rachis width	2 mm
No. of segments	17
Glume characteristics	
Glume length	14 mm
Glume width size	3 mm
Glume length size	Medium
Glume width size	Medium
Lower glume shape	Narrow humped
Glume attachment	Medium
Glume pubescence	Absent
Glume surface	Rough
Lower glume shoulder shape	Round
Lower glume shoulder width	Medium
Beak length	6 mm
Lower glume beak shape	Long
Lower glume beak size	Medium
Beak spicules	Absent
Keel spicules	1
Glume internal hair	Absent
Glume internal imprint	Small
Seed characteristics	
Seed color	Amber
Seed surface	Shinny

Seed shape	Oval
Seed length	6 mm
Seed width	2.5 mm
Seed Thickness	2 mm
Seed size	Medium
Seed brush	Medium
Seed germ size	Medium
1000 seed weight	42
Seed groove	Intermediate
Seed/ ear	55
Seed hardness	Medium
Variants	Nil

Opposition can be filed up to: 22-08-2024

8. Application No.: PBRR-Mungbean-75/23

Name of the applicant: Director, NIAB, Faisalabad

Institute: Nuclear Institute for Agriculture & Biology, Faisalabad

Name of Breeder(s):

- i. Dr. M. Jawad Asghar, PBG Division, NIAB, Faisalabad (Breeder)
- ii. Muhammad Shahid, PBG Division, NIAB, Faisalabad (Breeder)
- iii. Fiaz Ahmad, PBG Division, NIAB, Faisalabad (Breeder)
- iv. Khalid Pervaiz Akhtar, PPD, NIAB, Faisalabad (Associate Scientist)
- v. Dr. Amjad Hameed, PBG Division, NIAB, Faisalabad (Associate Scientist)

Name of Co-breeder(s):

Application for: New Plant Variety

Denomination of variety: NIAB Mung 2021

Crop: Mungbean (*Vigna radiata* L.)

Type of the variety: OPV

Name of initial variety
(in case EDV):

Not Applicable

Salient features:

CHARACTERISTICS	DESCRIPTION
Days to Maturity	70-80 days (Spring/Summer)
Maturity duration	Medium
Shorter than	NM 98
Longer than	NM 2011
Sowing date	Spring (1-31, march)
Seedling characteristics	
Seedling length	14.1 cm
Hypocotyl	6.7 cm
Hypocotyl colour	Greenish purple
Seedling bud pubescence	Profuse
Plant characteristics	
Growth habit	Erect
Main stem length	Spring/summer 45-50 cm
Taller than	NM 98
Shorter than	NM 2011
Plant color	Green
Canopy spread	Medium
Canopy width	17-18 cm
Stem hairiness	Sparse
Stem nodes	8-10
Stem color	Green
Twin'g tendency	Strong
Branch pattern	All over
No. of primary branches	2-3
Leaf characteristics	
Leaf color	Green
Petiole length	9-10 cm

Leaflet size	Medium
Number of Leaf Lets	3
Leaflet tip	Acute
Terminal leaf length	7.5 cm
Terminal leaf width	7.0 cm
Leaf pubescence	Medium
Terminal leaflet shape	Ovate
Leaf angle	Semi erect
Leaf petiole anthocyanin	Light purple
Leaf senescence	Medium
Flower characteristics	
Days to Flower	(50% flowering) 45-50 days
Flowering duration	Medium
Calyx color	Yellowish green
Corolla color	Greyish yellow
Flower size	Medium
Pedicle anthocyanin	Weak
Pod CHARACTERISITCS	
Raceme position	Inter
Pod length	8.5-9.5 mm
Pod width	5.5-6.0 mm
Pod size	Large
Larger than	NM 2016
Smaller than	NM 2011
Pod shape	Semi flat
Pod curvature	Slight
Pod beak shape	Hook
Pod beak	2-3 mm
Seeds/pod	9-10
Pod pubescence	Medium
Huadong length	7.5 cm

Pod constriction	Slight
Clusters/plant	7-9
Pod attachment	Pendant
Pod/cluster	5-6
Pod shattering	Absent
Pods/plant	35-45
Mature pod color	Blackish brown
Seed characteristics	
Seed color	Light green
Seed shape	Drum
Seed dots	Absent
Seed testa texture	Smooth
Seed surface	Shiny
Seed size	Bold
Larger than	NM 2011 & NM 2016
Smaller than	No bold seeded variety as compared to this new one is available in Pakistan
Seed length	5.0-6.0 mm
Seed width	3.75-4.25 mm
1000 seed weight	60-64 g
Cotyledon color	Yellow
Seed protein	24%
Hilum shape	Non-concave
Average Yield (Kg/ha)	1400-2200
Resistant	
Lodging	Resistant
Mosaic	Resistant
Others	Resistant
Variants	Nil
Distinctness: Semi erect canopy pattern, purple petiole and peduncle at vegetative stage having drooping pods, long pods, extra bold light green seed with shiny seed coat color.	

Opposition can be filed up to: 22-08-2024

9. Application No.: PBRR-Mungbean-76/23

Name of the applicant: Director, NIAB, Faisalabad

Institute: Nuclear Institute for Agriculture & Biology, Faisalabad

Name of Breeder(s):

- i. Dr. M. Jawad Asghar, PBG Division, NIAB, Faisalabad (Breeder)
- ii. Muhammad Shahid, PBG Division, NIAB, Faisalabad (Breeder)
- iii. Fiaz Ahmad, PBG Division, NIAB, Faisalabad (Breeder)
- iv. Khalid Pervaiz Akhtar, PPD, NIAB, Faisalabad (Associate Scientist)

Name of Co-breeder(s):

Application for: New Plant Variety

Denomination of variety: Abbas Mung

Crop: Mungbean (*Vigna radiata* L.)

Type of the variety: OPV

Name of initial variety
(in case EDV): Not Applicable

Salient features:

CHARACTERISTICS	DESCRIPTION
Days to Maturity	65-45 days (Spring/Summer)
Maturity duration	Medium
Shorter than	NM 98
Longer than	NM 92
Sowing date	Spring (1-31, march)
Seedling characteristics	
Seedling length	17.5 cm (20 Days)
Hypocotyl	7.3 cm
Hypocotyl colour	Greenish purple
Seedling bud pubescence	Profuse
Plant characteristics	

Growth habit	Erect
Main stem length	Spring/Summer 44-55 cm
Taller than	NM 92
Shorter than	NM 98
Plant color	Light Green
Canopy spread	Medium
Canopy width	15-18 cm
Stem hairiness	Sparse
Stem nodes	9-10
Stem color	Green
Twin'g tendency	Slight
Branch pattern	All over
No. Of primary branches	1-2
Leaf characteristics	
Leaf color	Light green
Petiole length	10-13 cm
Leaflet size	Medium
Number of Leaf Lets	3
Leaflet tip	Acute
Terminal leaf length	9.5 cm
Terminal leaf width	7.5 cm
Leaf pubescence	Absent
Terminal leaflet shape	Ovate
Leaf angle	Semi erect
Leaf petiole anthocyanin	Purple
Leaf senescence	Medium
Flower characteristics	
Days to Flower	(50% flowering) 40-45 days
Flowering duration	Medium
Calyx color	Yellowish green
Corolla color	Greyish yellow

Flower size	Medium
Pedicle anthocyanin	Weak
Pod CHARACTERISITCS	
Raceme position	Inter
Pod length	8.0-9.0 mm
Pod width	5.5-6.5 mm
Pod size	Medium
Larger than	NM 2016
Smaller than	NM 2011
Pod shape	Semi flat
Pod curvature	Slight
Pod beak shape	Hook
Pod beak	2-3 mm
Seeds/pod	10-11
Pod pubescence	Medium
Huadong length	6.73 cm
Pod constriction	Slight
Clusters/plant	8-9
Pod attachment	Pendant
Pod/cluster	5-6
Pod shattering	Absent
Pods/plant	40-50
Mature pod color	Blackish Brown
Seed characteristics	
Seed color	Light green
Seed shape	Drum
Seed dots	Absent
Seed testa texture	Smooth
Seed surface	Shiny
Seed size	Medium
Larger than	NM 98

Smaller than	NM 2006
Seed length	5.5-5.6 mm
Seed width	3.9-4.10 mm
1000 seed weight	48-52 g
Cotyledon color	Yellow
Seed protein	24%
Hilum shape	Non-concave
Average Yield (Kg/ha)	1300-2200
Resistant	
Lodging	Resistant
Mosaic	Resistant
Others	Resistant
Variants	Nil
Distinctness: Erect type canopy pattern, pods exhibit semi top bunching pattern, profuse hairs on stem, branches and petiole with light green leaf color, more no. Of pods and medium shiny seeds.	

Opposition can be filed up to: 22-08-2024

10. Application No.: PBRR-Chickpea-91/23

Name of the applicant: Arid Zone Research Institute, Bhakkar

Institute: Arid Zone Research Institute, Bhakkar

Name of Breeder(s):

- i. Mr. Niaz Hussain, Assistant Research Officer, AZRI, Bhakkar
- ii. Mr. Abdul Ghaffar, Assistant Research Officer, AZRI, Bhakkar
- iii. Dr. Muhammad Aslam, Economic Botanist, AZRI, Bhakkar
- iv. Mr. Mudassar Khaliq, Assistant Research Officer, AZRI, Bhakkar
- v. Dr. Khalid Hussain, Director, AZRI, Bhakkar
- vi. Mr. Muhammad Ramzan, Entomologist, AZRI, Bhakkar
- vii. Mr. Muneer Abbas, Assistant Research Officer, AZRI, Bhakkar

Name of Co-breeder(s):

Application for: New Plant Variety

Denomination of variety: Thal-2020 (TG1410)

Crop: Chickpea (*Cicer arietinum* L.)

Type of the variety: OPV

Name of initial variety
(in case EDV): Not Applicable

Salient features:

CHARACTERISTICS	DESCRIPTION
Maturity duration	Medium
Suitable for sowing	Medium
Seedling characteristics	
Seedling length	4.8 cm
Seedling anthocyanin	Absent
Plant characteristics	
Growth habit	Semi erect
Plant height	52-55 cm
Anthocyanin	Medium
Canopy spread	Medium
Stem characteristics	
Stem height	48-50
Stem color	Light green
Stem hairiness	Medium
Stem anthocyanin	Present
No. Of primary branches	3-4
No. Of secondary branches	8-10
No. Of tertiary branches	15-20
Leaf characteristics	
Leaf color	Green
Leaf angle	Semi erect
Rachis length	4.4 cm
No. Of leaflets	14-15

Leaflet length/width	14-15/12-13
Leaflet size	Medium
Leaflet tip	Acuminate
Leaf wax	Medium
Leaflet shape	Obovate
Leaf senescence	Medium
Flower characteristics	
Days to Flowering	88-91
Flowering duration	60-62
Flower color	Pink
Flower stripes on standard	Present
Flower size	Medium
Flower number/peduncle	One
Peduncle length	23-25
Pedice anthocyanin	Medium
Pod CHARACTERISTICS	
Length with thickness	3/1.5/1.4
Pod size	Medium
Pod shattering	Absent
Beak length	3-4
Pods plant	68-70
Seeds pod	1-2
Seed characteristics	
Seed color	D. Brown
Seed shape	Ram head
Length, width, think	9.6/7.8/7.4 mm
Seed size	Medium
Seed dots	Absent
Testa texture	Rough
Seed weight	26-28 g
Seed beak size	Medium

Yield (kg/ha)	3300-3500
Environmental adaptability	
Flowering response to seasons	Stable
Drought tolerance	Medium
Cold tolerance	Medium
Heat tolerance	Medium
Resistant to insects/pests	
Relative tolerant against chickpea pod bores.	
Resistant to disease	
Wilt resistant, Blight tolerant	
Distinctness: Early maturing, Bold seeded, Disease resistant.	

Opposition can be filed up to 22-08-2024

11. Application No.: PBRR-Wheat-92/23

Name of the applicant: Wheat Program, PARC, NARC, Islamabad

Institute: Wheat Program, PARC, NARC, Islamabad

Name of Breeder(s):

- i. Dr. Maqsood Qamar (D-040, Wheat program, CSI, NARC, Islamabad)
- ii. Mrs. Sundas Waqar (D-041, Wheat program, CSI, NARC, Islamabad)
- iii. Dr. Zahid Mehmood (D-042, Wheat program, CSI, NARC, Islamabad)
- iv. Syed Haider Abbas (D-043, Wheat program, CSI, NARC, Islamabad)
- v. Dr. Sikander Khan Tanveer (D-049, Wheat program, CSI, NARC, Islamabad)
- vi. Dr. Imtiaz Hussain (D-030, Wheat program, CSI, NARC, Islamabad)
- vii. Dr. Ghulam Muhammad Ali (Floor no. 5, PARC, Islamabad)

Name of Co-breeder(s):

Application for: New Plant Variety

Denomination of variety: Wafaq-2023

Crop: Wheat (*Triticum aestivum* L.)

Type of the variety: OPV

Name of initial variety
(in case EDV): Not Applicable

Salient features:

CHARACERTISTICS	DESCRIPTION
Origin	Exotic
Breeding method	Selection
Areas of adaptation	Rainfed and irrigated areas of Pakistan
Planting time	1st Nov to 15th Nov
Maturity duration	150-160 days
Earlier than	Pakistan-2013
Later than	Fareed-2006
Suitable for sowing	1 st week of Nov
Seedling Characteristics	
Growth habit	Erect
Coleoptile color	White
Seedling anthocyanin	Absent
Plant Characteristics	
Plant height	75-108 cm
Taller than	Fareed-2006
Shorter than	Pakistan-2013
Color at booting	Green
Stem Characteristics	
Stem anthocyanin	Absent
Stem waxy bloom	Strong
Stem wall thickness	Thin
Stem stiffness	Soft
Stem diameter	3mm
Peduncle length	34-39cm

PRODUCTIVE TILLERS/m ²	481
Straw color	Yellowish white
Lodging	Absent
Flag Leaf Characteristics	
Flag leaf attitude	Erect
Flag leaf twist	Strong
Flag leaf length	14-30cm
Flag leaf width	1.2-2.4cm
Sheath wax	Medium
Sheath hairiness	Absent
Auricle hairiness	Sparse
Auricle anthocyanin	Weak
Ear Characteristics	
50% ear emergence	100-125 days
Ear size	Medium
Ear length	9-12.5cm
Ear width	1-1.5cm
Wax at anthesis	Weak
Colour at maturity	Yellowish white
Ear shape	Tapering
Supernumerary spikelet	Absent
Speltoids	Absent
Shattering	Resistant
Flex/kink/twist	Medium
Ear awnedness	Awned
Awn distribution	Whole
Awn length	Medium
Awn color	Yellowish white
Awn habit	Erect
Anther color	Yellow
Rachis hair apical	Medium

Rachis hair margin	Sparse
Rachis length	9 to 10 mm
Rachis width	2 to 5 mm
Number of segments	16-20
Glume Characteristics	
Glume length	0.8-1.2 cm
Glume width	0.3-0.4 cm
Glume length size	Medium
Glume width size	Medium
Lower glume shape	Narrow humped
Glume attachment	Strong
Glume pubescence	Absent
Glume surface	Smooth
Lower glume shoulder shape	Slopping
Lower glume shoulder width	Medium
Beak length	0.2-0.3 cm
Lower glume beak shape	Long sharp/inflected
Lower glume beak size	Medium
Beak spicules	Absent
Glume internal hair	Absent
Glume internal imprint	Absent
Seed Characteristics	
Seed colour	Amber
Seed surface	Opaque
Seed shape	Ovate
Seed length	7-8 mm
Seed width	3-4 mm
Seed thickness	2-3 mm
Seed size	Medium
Seed brush	Medium
Seed germ size	Medium

1000 seed weight	40-45 g
Seed groove	Intermediate
Seeds/ear	50-70
Seed hardness	Hard
Protein	13.4
Chapati quality	Good
Bread quality	Good
Yield	8600 kg/ha
Environment Stability	
Flowering response to season	Stable
Drought tolerance	Tolerant
Tolerance to salinity	Tolerant
Heat tolerance	Tolerant
Resistance To Insect/ Pest	
Stem rust (black): (<i>Puccinia graminis</i>)	Resistant
Leaf rust (brown): (<i>Puccinia recondite</i>)	Resistant
Stripe rust (yellow): (<i>Puccinia striiformis</i>)	Resistant
Powdery mildew	Resistant
Distinguishing Characteristics	Yellowish white at maturity with erect flag leaf, long sharp/inflected lower glume beak and narrow humped lower glume shoulder

Opposition can be filed up to: 22-08-2024

12. Application No.: PBRR-Sunflower- 105/24

Name of the applicant: Crop Science Institute, NARC, Islamabad

Institute: Crop Science Institute, NARC, Islamabad

Name of Breeder(s):

i. Dr. Ihsan Ullah Khan, Oilseeds Research Program, NARC, Islamabad

Name of Co-breeder(s): i. Mrs. Iffat Ihsan

Application for: New Plant Variety

Denomination of variety: NARC-SUN-2020

Crop: Sunflower (*Helianthus annuus* L.)

Type of the variety: Hybrid

Name of initial variety
(in case EDV): Not Applicable

Salient features:

CHARACTERISTICS	DESCRIPTION
Maturity days	90-110 Medium
Earlier than	AGSUN-5264
Seedling characteristics	
Seedling length	5.8 cm
Seedling color	Light green
Seedling anthocyanin	Absent
Plant/Stem characteristics	
Main stem color at heading	Yellowish green
Growth point	Yellow green
Stem anthocyanin	Medium
Pubescence at the top 5 cm	Medium
Stem pubescence length	Short
Stem stiffness	Strong
Stem diameter (at mid)	19.49 mm thick
Plant height at full flowering	144.7 cm
Stem branching (excluding environmental branching)	Absent
Length of internode (in central third of stem)	4.77 cm
Type of root	Tap
Leaf characteristics	
Leaves/plant	18
Leaf color	Green
Leaf anthocyanin coloration on margin of young leaves	Present

Leaf attitude	Descending
Leaf surface	Smooth
Leaf pubescence	Sparse
Leaf pubescence length	Short
Leaf length	24.86 cm
Leaf width	23.2 cm
Leaf size	Large
Petiole length cm (at bottom)	14.4 cm
Leaf petiole anthocyanin	Moderate
Leaf shape	Cordate
Leaf shape of distal part	Acuminate
Leaf apex	Acuminate
Leaf base shape	Auriculate
Leaf auricles	Large
Leaf wings	Weakly expressed
Leaf margin	Serrate
Leaf margin serration (fineness)	Coarse
Leaf angle of lower/lateral veins	Right angle
Leaf height of tip of the blade compared to insertion of petiole (at 2/3 height of plant)	Low
Leaf habit of petiole	Semi erect
Leaf petiole pubescence	Medium
Leaf senescence	Late
Leaf shape of cross section	Flat
Number of leaves on main stem	Low <21
Flower characteristics	
Days to flowering in 50% plants	70-90 Medium-late
Earlier than	AGSUN-5264, HYSUN-33
Ray floret density/ number	Dense, many, 41-50
Ray floret length	79.2 mm
Ray floret width	23.6 mm
Ray floret color	Yellow

Ray floret size	Medium
Disc flower color	Yellow
Disc flower	Very strong
Pollen color	Yellow
Head characteristics	
Head size/ diameter	19.48 cm, Medium, 15-20 cm
Head main shape of grain side	Strongly convex
Pubescence	Dense
Involucre length	Medium
Involucre width	Wide
Involucre anthocyanin	Absent
Head bracts (on back)	1-2
Bract shape	Clearly rounded
Bract anthocyanin	Absent
Head attitude	Turned down with slightly curved stem
Head angle	180°
Thresh ability	Easy
Shattering	Low
Seed characteristics	
Seed shape	Broad ovoid
Seed size	Medium
Seed length	12.06 mm, Medium
Seed width	6.28 mm
Seed thickness	3.49 mm
Seed main color	Grey
Seed secondary color	Grey
Seed stripes on margin	Strongly expressed
Seed stripes between margin	Strongly expressed
Seed primary color of stripes	Grey
Seed spots/mottling on pericarp	Absent
Seed pericarp thickness	Thin, 0.33 mm

Seed cross section shape	Flat
Seed pubescence	Sparse
Seed index (1000)	70g, high, >60g

Opposition can be filed up to: 22-08-2024

13. Application No.: PBRR-Sesame-107/24

Name of the applicant: Chief Scientist, ORI, Faisalabad

Institute: Oilseed Research Institute, Faisalabad

Name of Breeder(s):

i. Maria Ghias, Scientific Officer, Oilseeds Research Institute, Faisalabad

ii. Dr. Salsabeel Rauf, Scientific Officer, Oilseeds Research Institute, Faisalabad

iii. Hafiz Saad Bin Mustafa, Scientific Officer, Oilseeds Research Institute, Faisalabad

iv. Dr. Ejaz ul Hassan Senior Scientist, Oilseeds Research Institute, Faisalabad

Name of Co-breeder(s):

Application for: New Plant Variety

Denomination of variety: Faisalabad Til

Crop: Sesame (*Sesamum indicum* L.)

Type of the variety: OPV

Name of initial variety
(in case EDV): Not Applicable

Salient features:

CHARACTERISTICS	DESCRIPTION
Days to maturity	110-115
Maturity duration	Early-Medium
Sowing date	May-June
Seedling Characteristics	

Seedling height cm (2 weeks)	3.2-4.4
Hypocotyl anthocyanin	Absent
Hypocotyl length cm	1.8-2.0
Cotyledon insertion	Pedicellate
Cotyledon color	Green
Cotyledon length	7.5-8.2 mm
Cotyledon width	7.0-7.8 mm
Stem Characteristics	
Stem length	139-151 cm
Stem height	Medium
Internode length	2.8-3.9 cm
Stem diameter	0.9-1.1 cm
Stem thickness	Medium
Nodes to 1st flower	4-5
Stem shape	Very slight ridged
Stem color	Light green brown
Stem anthocyanin	Present
Stem hairiness	Sparse-Medium
Leaf Characteristics	
Leaf color	Green
Mid leaves attitude	Semi erect-horizontal
Leaf hairiness	Very sparse
Basal leaf shape	Entire
Leaf type	Cup shape-Lanceolate
Leaf length	11.5-13.9 cm
Leaf width	4.1-4.6 cm
Leaf senescence	Late
Flower Characteristics	
Days to flowering 50%	45-50
Corolla color	White with light purple
Corolla hairs	Medium

Flower tip color	Colored
Pollen density	Low-Medium
Stigma exertion	Exerted
Flowers/leaf axil	1-2
Capsule Characteristics	
Capsule length	24-26 mm
Capsule shape	Broad oblong
Capsule color	Brown/Tan
Capsule hairs	Medium
Hair length	Short
Carpel/capsule	4
Capsule shattering	Absent
Capsules/plant	190-320
Seeds/capsule	52-63
Seed Characteristics	
Seed color	White
Seed length	2.5-2.8 mm
Seed width	1.8-1.9 mm
Seed size	Small-Medium
Seed surface	Smooth
1000 seed weight (g)	2.5-2.8
Distinguishing Characteristics: Branched with bushy appearance	

Opposition can be filed up to: 22-08-2024

14. Application No.: PBRR-Sesame-109/24

Name of the applicant: Chief Scientist, ORI, Faisalabad

Institute: Oilseed Research Institute, Faisalabad

Name of Breeder(s):

- i. Muhammad Anwar, Scientific Officer (Rtd.), Oilseeds Research Institute, Faisalabad
- ii. Maria Ghias, Scientific Officer, Oilseeds Research Institute, Faisalabad

iii. Dr. Salsabeel Rauf, Senior Scientist, Oilseeds Research Institute, Faisalabad

iv. Hafiz Saad Bin Mustafa, Scientific Officer, Oilseeds Research Institute, Faisalabad

v. Dr. Ejaz ul Hassan Senior Scientist, Oilseeds Research Institute, Faisalabad

vi. Muhammad Altaf, Senior Scientist, Oilseeds Research Institute, Faisalabad

Name of Co-breeder(s):

Application for: New Plant Variety

Denomination of variety: Anmol Til

Crop: Sesame (*Sesamum indicum*)

Type of the variety: OPV

Name of initial variety
(in case EDV): Not Applicable

Salient features:

CHARACTERISTICS	DESCRIPTION
Days to maturity	100-110
Maturity duration	Medium
Sowing date	July
Seedling characteristics	
Seedling height cm (2 weeks)	6.5-8.0
Hypocotyl anthocyanin	Absent
Hypocotyl length	1.4-2.0 cm
Cotyledon insertion	Pedicellate
Cotyledon color	Green
Cotyledon length	9-10 mm
Cotyledon width	8-10 mm
Stem characteristics	
Stem length	170-195 cm
Stem height	Tall
Internode length	8.5-10.0 cm

Stem diameter	1.2-1.5 cm
Stem thickness	Medium
Nodes to 1st flower	5-7
Stem shape	Square
Stem color	Light brown
Stem anthocyanin	Absent
Stem hairiness	Weak
Leaf characteristics	
Leaf color	Green
Mid leaves attitude	Semi erect/horizontal
Leaf hairiness	Absent
Basal leaf shape	Lobed
Leaf type	Flat
Leaf length	14.5-18.0 cm
Leaf width	7.0-9.0 cm
Leaf senescence	Medium
Flower characteristics	
Days to flowering 50%	38-45
Corolla color	White with light purple
Corolla hairs	Sparse
Flower tip color	Colored
Pollen density	Low-medium
Stigma exertion	Enclosed
Flowers/leaf axil	1-2
Capsule characteristics	
Capsule length	26-30 mm
Capsule shape	Square
Capsule color	Brown
Capsule hairs	Sparse to medium
Hair length	Short
Carpel/capsule	4-6

Capsule shattering	Medium
Capsules/plant	80-100
Seeds/capsule	50-75
Seed characteristics	
Seed color	White
Seed length	3.0-3.2 mm
Seed width	1.6-2.0 mm
Seed size	Medium
Seed surface	Smooth
1000 seed weight (g)	2.65
Resistant of lodging	Medium
Distinguishing characteristics: Single stem with 1 to 3 basal branches and multi locules cluster pods bearing.	

Opposition can be filed up to: 22-08-2024

NEWS AND EVENTS

HEAVY RAINS SEVERELY DAMAGED STANDING CROPS

Recent heavy rains and flash flooding have caused extensive damage to wheat fields and fruit orchards in Swat, Shangla, and Dir districts of Khyber Pakhtunkhwa, resulting in considerable economic losses for local farmers. The floods, especially in the low-lying regions adjacent to the Punjkora and Kabul rivers, have worsened the financial difficulties faced by farmers in the area after their fields were entirely flooded. The agriculture department of Khyber Pakhtunkhwa intends to carry out a survey of the impacted regions to assess possible relief measures.

COTTON PRODUCTION TARGET

Pakistan has set cotton production target of 10.8 million bales for 2024-25. The Federal Committee on Agriculture (FCA), led by Federal Minister Rana Tanveer Hussain, proclaimed this target during a discussion on Kharif season crops, which also encompasses rice, maize, and sugarcane. The meeting emphasized the critical importance of cotton in enhancing exports and driving economic development, with plans centered on ensuring input availability, and usage of advanced farming techniques. The FCA also evaluated the performance of Rabi crops, acknowledging both achievements and shortcomings, and deliberated on the availability of agricultural inputs and the management of urea fertilizer for the upcoming planting season



KISSAN TV

Romina Khurshid Alam, the Prime Minister's Coordinator on Climate Change, revealed intentions to introduce Kissan TV, a specialized channel designed to assist farmers in Pakistan to face the challenges posed by climate change. The channel will offer informative content on strategies for climate adaptation, disaster management, and sustainable agricultural practices, airing in six regional languages through Pakistan Television.