



MORPHOLOGICAL DESCRIPTOR

MASH

Federal Seed Certification & Registration Department
Ministry of Food, Agriculture & Livestock
Government of Pakistan, Islamabad

Testing Genetic Suitability and Adaptability: and Registration of Crop Varieties is Legal Obligation under Section 8 of Seed Act, 1976.

Dr. M. Ashraf Tajammal
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GENERAL

Variety name

Parentage

Pedigree

Breeder (s)

Comparable variety (s)

Breeding center/institute

Variety maintainer

Origin Local Exotic

Breeding method Selection Hybridization Introduction Any other

Areas of adaptation

Planting time (Spring/summer)

Maturity duration Short Medium Long

Suitable for sowing Early Medium Late All sowings

Type of Variety Determinate S. determinate Indeterminate

Earlier than Cultivar

Later than Cultivar

SEEDLING CHARACTERISTICS

Hypocotyl anthocyanin Absent Present

Seedling length (cm) (After Two weeks)

Seedling pubescence Absent Present

Intensity of pubescence Sparse Medium Profuse

PLANT CHARACTERISTICS

Growth habit Erect (<30°) Semi erect (30°-60°) Spreading (>60°)

Growth type Determinate Indeterminate

Plant height (cm)

Plant height (Short <45 cm) (Medium 45-60 cm) (Long >60 cm)

Taller than Cultivar

Shorter than Cultivar

Canopy spread Narrow Medium Wide

STEM CHARACTERISTICS

Stem color L. green Green Greenish purple Purple Strong purple

Stem hairiness Absent Sparse Medium Profuse

No. of nodes/stem

Branching pattern Basal Central Top All over

No. of secondary branches

Lodging Resistant Low Moderate High

LEAF CHARACTERISTICS

Leaf attitude Erect Semi erect Horizontal

Petiole anthocyanin Absent Weak Medium Strong

Petiole color Green Green with purple splashes Purple

Petiole length (cm)

Leaf color L. green Green Dark green

Leaf vein color Green Purple

Terminal leaflet shape Deltoid Ovate Lanceolate Cuneate

Leaf pubescence Absent Present

Leaf size Small Medium Large (at 5th node from the base)

No. of leaflets/leaf

Terminal leaflet length (cm)

Terminal leaflet width (cm)

FLOWER CHARACTERISTICS

Days to flowering [50% flowering]

Flowering duration Short Medium Long

Color of petal (Standard) L. yellow Yellow Yellowish purple Purplish green Anyother

Flower size Small Medium Large

Peduncle anthocyanin Absent Weak Medium Strong

Raceme position Above canopy Intermediate No pods above canopy

POD CHARACTERISTICS

Immature pod color Green Dark green Yellowish green
 Pod position Above canopy Intermediate Not visible
 Mature pod color Brown Blackish brown
 Pod shape Flat Convex/semi flat Rounded
 Pod size Small Medium Large
 Pod length/ width (cm)
 Larger than Cultivar
 Smaller than Cultivar
 Pod curvature Absent Slight Medium Strong
 Pod beak length (mm)
 Pod beak shape Hook Knob Straight
 Pod pubescence Sparse Medium Profuse
 Pod constriction Slight Medium Strong
 Pod attachment Pendent Semi erect Erect
 Pod shattering Absent Low Medium High
 Pod shedding Absent Low Medium High
 Peduncle length (cm)
 No. of clusters/plant
 Pods/clusters
 Pods/plant
 Seeds/pod

SEED CHARACTERISTICS

Seed color Greenish brown Brown Black Mottled
 Seed shape Round Oval Drum
 Seed coat pattern Absent Present
 Seed testa texture Smooth Rough Tuberculate
 Seed luster Shiny Dull
 Seed size Small Medium Bold
 Seed length (mm) [Range.....]
 Seed width (mm) [Range.....]
 Seed thickness (mm) [Range.....]
 Cotyledon color Whitish Off white
 Hilum shape Concave Not concave
 1000, seed weight (g)
 Seed protein (%)
 Yield (kg/ha)