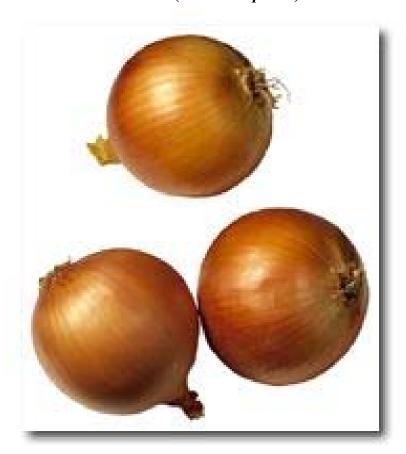


MORPHOLOGICAL DESCRIPTOR

ONION (Allium cepa L.)



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.

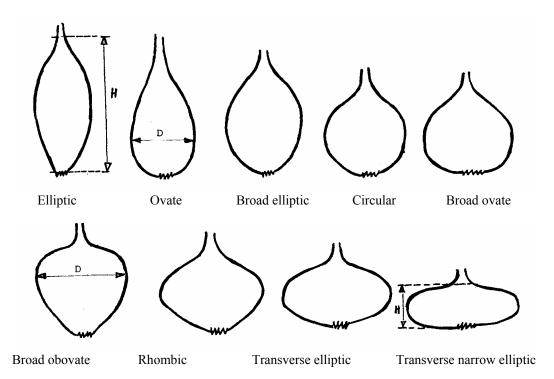
Dr. M. Ashraf Tajammal Ms. Naheed Naz

<u>GENERAL</u>					
Variety name					
Parentage					
Pedigree					
Breeder (s)					
Comparable variety (s)					
Breeding center/institute					
Variety maintainer					
Origin	□ Local	□ Exotic			
Breeding method		☐ Hybridization	☐ Introduction	□ Any other	
Areas of adaptation					
Planting time					
Maturity duration	□ Short		□ Long		
Maturity duration		- Medium	Long		
LEAF CHARACTERISTICS					
Leaf color	☐ L. green	☐ Medium green	□ Dark green	☐ Bluish green	
Leaf attitude	☐ Erect	☐ Semi erect			
Leaf length (cm)					
Leaf width (cm)					
Leaf waxiness	□ Weak	☐ Medium	☐ Strong		
			_ 28		
BULBCHARACTERISTICS					
Bulb shape	□ Elliptic □	Ovate Broad e	elliptic Circula	ar □ Broad ovate □ Broad obovate	
		Transverse ellipti			
Bulb size		☐ Medium	☐ Large		
Bulb height (cm)		_ modium	_ Large		
Bulb diameter (cm)					
Bulb width of neck	□ Thin	☐ Medium	☐ Thick		
Skin color	□ White	□ Yellow		ish brown □ Orange red □ Dark red	
Skin adherence	□ Loose	☐ Medium	☐ Tight	ish brown - Orange red - Dark red	
Skin thickness	☐ Thin	□ Medium	☐ Thick		
			☐ Three	□ Many	
Number of skin layers	□ One	☐ Two		☐ Many	
Flesh color	□ White	☐ Greenish white		□ Purplish	
Flesh firmness	□ Soft	□ Medium	□ Firm		
Root disc width		□ Medium	□ Large		
Root disc position	□ Deep	☐ Flat	☐ Outstanding		
Number of axis/bulb	□ One	□ Two	☐ Three	\square Many	
Bulb shape in cross section	□ Asymmetrical □ Symmetrical				
Pungency	□ Low	☐ Medium	□ High		
Dry matter	□ Low	☐ Medium	□ High		
Male sterility (%)	□ 10	\square 20	□ 30		
HEAD CHARACTERISTICS	_				
Head height (cm)					
Width of main axis (cm)					
Number of axis	□ One	\Box Two	☐ Three	\square Many	
Color of axis at flowering	\square L. green \square	Medium green	Dark green □ E	Bluish	
Color of axis at maturity	☐ Green	☐ L. yellow	□ Yellow □ Str	aw	
Head size (cm)					
Color after opening	□ White				
Color at maturity	\square L. brown				

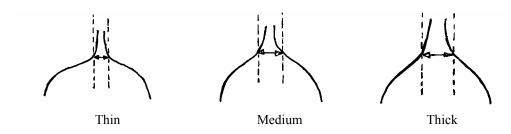
SEED CHARACTERISTICS				
Seed color Seed shape	□ L. black□ Angular	□ Black□ Quadrangular	☐ Shiny black	
Seed thickness (mm) Seed size 000, seed weight (g)	□ V. small	□ Small	□ Medium	□ Bold
ENVIRONMENTAL ADAPT Flowering Response to seasons			er define condition Highly variable	ns)
Drought tolerance (Measured as reduction in yield).	☐ Least toleran	t □ Medium	☐ Most tolerant	
Tolerance to salinity (Measured by reduction in plant height 30 days after sowing).	☐ Least toleran	t □ Medium	☐ Most tolerant	
Tolerance to acid soils (Measured as reduction in plant height 30 days after sowing).	☐ Least toleran	t □ Medium	☐ Most tolerant	
Cold tolerance (Measured as reduction in general vigour and productivity after being continuously exposed to an average temperature of 15 °C for at least 15 days).	□ Least toleran	t □ Medium	☐ Most tolerant	
Heat tolerance (Measured as yield reduction when continuously exposed to average of 40 °C during the flowering period).	☐ Least toleran	t □ Medium	☐ Most tolerant	
RESISTANCE TO INSECTS	/PESTS			
RESISTANCE TO DISEASE	<u>s</u>			
DISTINGUISHING CHARA	<u>CTERISTICS</u>			
• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •

Morphological Descriptor		
		Onion
	•••••	
	•••••	
	•••••	
RECOMMENDED/APPROVED BY		
Variety Evaluation Committee (VEC)	□ Yes	□ No
Experts Sub Committee	□ Yes	□ No
Provincial Seed Council	□ Yes	□ No
1 Tovincial Seed Council	□ 1 C3	_ 110
COMMENTS OF SPOT EXAMINATION		
ADDITIONAL INFORMATION		

BULB HEIGHT/DIAMETER AND SHAPE



BULB WIDTH OF NECK

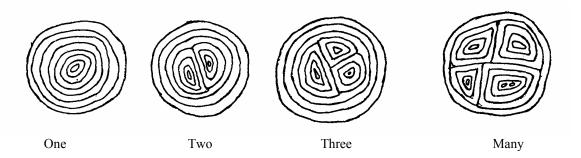


POSITION OF ROOT DISC



Deep Flat Outstanding

NUMBER OF AXIS/BULB



BULB SHAPE IN CROSS SECTION

