## **Bottle Gourd Genetic Resources Characterization Descriptor**

1   Farly Plant Vigour   Visual observation   1 - Poor, 2 - Good, 3 - Very good 4 - Other   Sowing	S.No.	Descriptor	No.of observation	Method of data record	Stage of the crop
2 Plant Growth Habit 5 random plants 1 - Short Viny, 2 - Medium Viny, 3 - Long Viny, 4-Other To be recorded on fully grown Plant To be recorded at flowering Stage 1 - Corleta, 2 - Straight, 3 - Other To be recorded at flowering Stage 1 - Corleta, 2 - Oblong, 3 - Ovate, 4 - Ovavate, 5 - reniform, 6 - Other To be recorded at flowering Stage 1 - Cordate, 2 - Oblong, 3 - Ovate, 4 - Ovavate, 5 - reniform, 7 - Other recorded at flowering Stage 1 - Cordate, 2 - Oblong, 3 - Ovate, 4 - Ovavate, 5 - reniform, 7 - Other recorded at full foliage stage 1 - Cordate, 2 - Oblong, 3 - Ovate, 4 - Ovavate, 5 - reniform, 7 - Other recorded at full foliage stage 1 - Cordate, 2 - Oblong, 3 - Ovate, 4 - Ovavate, 5 - reniform, 7 - Other recorded at full foliage stage 1 - Cordate, 3 - Oblong, 3 - Ovate, 4 - Ovavate, 5 - reniform, 7 - Other recorded at full foliage stage 1 - Cordate, 3 - Oblong, 3 - Ovate, 4 - Ovavate, 5 - reniform, 7 - Other recorded at full foliage stage 1 - Ovavate, 5 - reniform, 8 - Ovavate, 5 - reniform, 8 - Ovavate, 5 - reniform, 8 - Ovavate, 5 - reniform, 9 -		-			To be recorded after 30 days of
Tendril Type	1		Visual observation	1 - Poor, 2 - Good, 3- Very good 4 - Other	
Tendril branching		Plant Growth Habit			
5 Leaf Shape Visual observation 6 Leaf Size Visual observation 7 Internode Length (cm) 5 random plants Quantitative To be recorded as full foliage stage To be recorded as average of distance between 4* and 5* node in 5-10 random plants at full foliage stage To be recorded as average of distance between 4* and 5* node in 5-10 random plants at full foliage stage To be recorded as number of days from sowing/transplanting date to the date when at least 50% of plants show first female flower open I node of the date when at least 50% of plants show first female flower open I node of the date when at least 50% of plants show first female flower open I node of the date when at least 50% of plants show first female flower open I node of the date when at least 50% of plants show first female flower open I node of the date when at least 50% of plants show first female flower open I node of the date when at least 50% of plants show first female flower open I node of the date when at least 50% of plants show first female flower open I node of the date when at least 50% of plants show first female flower open I node of the date when at least 50% of plants show first female flower open I node of the date when at least 50% of plants show first female flower open I node of the date when at least 50% of plants show first female flower open I node of the date when at least 50% of plants show first female flower open I node of the date when at least 50% of plants show first female flower open I node of the date when at least 50% of plants show first female flowering stage To be recorded at flult foliage stage I node of the date when at least 50% of plants show first female flowering stage I node of the date when at least 50% of plants show first female flowering stage I node of the plants at the node of the date when at least 50% of plants at the node of the date when at least 50% of plants at the node of the main stem/vine at peak fruiting stage.  To be recorded as number of days from date of sowing/transplanting to the specified	3		Visual observation		To be recorded at flowering Stage
5 Leaf Shape Visual observation 6-other To be recorded at full foliage stage To be recorded as average of distance between 4th and 5th and plants I full foliage stage To be recorded as average of distance between 4th and 5th and plants at full foliage stage To be recorded as number of days from sowing/transplanting date to the date when at least 50% of plants show first female flower open I - Monoecious, 2- Gynomonoecious, 3- Andromonoecious, 4- Gyno Andromonoecious, 5- Andromonoecious, 5- Andromonoecious, 5- Andromonoecious, 5- Andromonoecious, 5- Others To be recorded at flowering stage To be recorded at flowering stage I lead to the date when at least 50% of plants show first female flower open I will be provided at flowering stage To be recorded at flowering stage I lead to the date when at least 50% of plants show first female flower open I lead to the date when at least 50% of plants show first female flower open I lead to the date when at least 50% of plants show first female flower open I lead to the date when at least 50% of plants show first female flower open I lead to the date when at least 50% of plants show first female flower open I lead to the date when at least 50% of plants show first female flower open I lead to the date when at least 50% of plants show first female flower open I lead to the date when at least 50% of plants show first female flower open I lead to the date when at least 50% of plants show first female flower open I lead to the date when at least 50% of plants show first female flower open I lead to the date when at least 50% of plants show first female flower first female f	4	Tendril branching	Visual observation	1- Unbranched, 2- Branched, 3- Other	To be recorded at flowering Stage
Leaf size				1- Cordate, 2- oblong, 3- ovate, 4- ovavate, 5- reniform,	
To be recorded as average of distance between 4th and 5th node in 5-10 arandom plants    To be recorded as average of distance between 4th and 5th node in 5-10 arandom plants at full foliage stage are arrandom plants at full foliage stage. To be recorded as number of days from sowing/transplanting date to the date when at least 50% of plants show first female flower open					
Internode Length (cm)   5 random plants   Quantitative   random plants at full foliage stage   To be recorded as number of days from sowing/transplanting date to the date when at least 50% of plants show first female llower open	6	Leaf size	Visual observation	1- Small, 2- medium, 3- large, 4- other	$\mathcal{E}$
Days to 50% Floweing  Sex Type  Visual observation  Ouantitative  1- Monoecious, 2- Gynomonoecious, 3- Andromonoecious, 5- Andromonoecious, 4- Gyno Andromoecious, 5- Andromonoecious, 4- Gyno Andromoecious, 5- Andromonoecious, 5- Andromonoecious, 6- Gynoecious, 7- Others  To be recorded at flowering stage  To be recorded at marketable stage  Fruit shape  Visual observation  Visual observation  Visual observation  Fruit skin colour  Visual observation  Visual observation  Seed length-breadth ratio  Seed length-breadth ratio  Seed length-breadth ratio  Vine Length (cm)  Visual observation  Visual observation  Quantitative  To be recorded at marketable stage  To be recorded as average of length- breadth of 5-10 random seeds  To be recorded as average of length- breadth of 5-10 random seeds  To be recorded as average of same 10  plants at the end of flowering stage.  The branch that arises from the main vine/stem is known as primary  branching  To be recorded as number of days  from date of sowing/transplanting to					
Days to 50% Floweing  Sex Type  Visual observation  Ouantitative  1- Monoecious, 2- Gynomonoecious, 3- Andromonoecious, 5- Andromonoecious, 4- Gyno Andromoecious, 5- Andromonoecious, 4- Gyno Andromoecious, 5- Andromonoecious, 5- Andromonoecious, 6- Gynoecious, 7- Others  To be recorded at flowering stage  To be recorded at marketable stage  Fruit shape  Visual observation  Visual observation  Visual observation  Fruit skin colour  Visual observation  Visual observation  Seed length-breadth ratio  Seed length-breadth ratio  Seed length-breadth ratio  Vine Length (cm)  Visual observation  Visual observation  Quantitative  To be recorded at marketable stage  To be recorded as average of length- breadth of 5-10 random seeds  To be recorded as average of length- breadth of 5-10 random seeds  To be recorded as average of same 10  plants at the end of flowering stage.  The branch that arises from the main vine/stem is known as primary  branching  To be recorded as number of days  from date of sowing/transplanting to	7	Internode Length (cm)	5 random plants	Quantitative	random plants at full foliage stage
Andromonoecious, 4- Gyno Andromoecious, 5- Androecious, 7- Others  To be recorded at flowering stage To be recorded at marketable stage To be recorded at marketable stage To be recorded at marketable stage To be recorded as average of length- breadth of 5-10 random seeds To be recorded as average of length- breadth of 5-10 random seeds To be recorded as average of same 10 plants at the end of flowering stage. The branch that arises from the main vine/stem is known as primary branching To be recorded as number of days from date of sowing/transplanting to	8	-		Quantitative	To be recorded as number of days from sowing/transplanting date to the date when at least 50% of plants show
9 Sex Type Visual observation   Androecious, 6- Gynoecious, 7- Others   To be recorded at flowering stage			•	1- Monoecious, 2- Gynomonoecious, 3-	
To be recorded as ratio of female to male flowers at flowering stage   To be recorded as ratio of female to male flowers at flowering stage				Andromonoecious, 4- Gyno Andromoecious, 5-	
10   Sex Ratio   Visual observation   Quantitative   To be recorded at flowering stage	9	Sex Type	Visual observation	Androecious, 6- Gynoecious, 7- Others	To be recorded at flowering stage
To be recorded at flowering stage   To be recorded at flowering stage   To be recorded at flowering stage   To be recorded as average of 5-10 random fruits   To be recorded as average of 5-10 random fruits at marketable stage   To be recorded as average of 5-10 random fruits at marketable stage   To be recorded as average of 5-10 random fruits at marketable stage   To be recorded as average of 5-10 random fruits at marketable stage   To be recorded as average of 5-10 random fruits at marketable stage   To be recorded on marketable fruits   To be recorded on marketable fruits   To be recorded on marketable fruits   To be recorded as average of length-breadth of 5-10 random seeds   To be recorded from ground level to the tip of the main stem/vine at peak fruiting stage.   To be recorded as average of same 10 plants at the end of flowering stage.   To be recorded as average of same 10 plants at the end of flowering stage.   The branch that arises from the main vine/stem is known as primary branching   To be recorded as number of days from date of sowing/transplanting to					
Peduncle Length  S random fruits  Quantitative  1-Elliptical, 2- Elongate, 3-Pyriform, 4- Oblong, 5-Club Shaped, 6-Top shaped, 7-Globular, 8- Dumbbellshaped, 9- Kamandal Shaped, 10-Lengthened cylindrical, 11- others  To be recorded at marketable stage  1-Light green, 2-Green, 3-Dark green, 4- Patchy green, 5- others  To be recorded at marketable stage  1-Light green, 2-Green, 3-Dark green, 4- Patchy green, 5- others  To be recorded at marketable stage  1-Sweet, 2-Bitter, 3-Others  To be recorded at marketable stage  To be recorded on marketable fruits  To be recorded fon ground level to the tip of the main stem/vine at peak fruiting stage.  To be recorded as average of same 10 plants at the end of flowering stage.  To be recorded as average of same 10 plants at the end of flowering stage.  To be recorded as number of days from date of sowing/transplanting to					
12   Peduncle Length   5 random fruits   Quantitative   random fruits at marketable stage	11	Flower Colour	Visual observation	1-White, 2- Cream, 3- Yellow, 4- Orange, 5- other	
Shaped, 6-Top shaped, 7-Globular, 8- Dumbbellshaped, 9- Kamandal Shaped, 10-Lengthened cylindrical, 11- others  To be recorded at marketable stage  1-Light green, 2-Green, 3-Dark green, 4- Patchy green, 1-Light green, 2-Green, 3-Da	12	Peduncle Length	5 random fruits	Quantitative	
14 Fruit skin colour Visual observation 5- others To be recorded at marketable stage 15 Fruit Taste 5 random fruits 1-Sweet, 2-Bitter, 3-Others To be recorded on marketable fruits 16 Seed length-breadth ratio 5 random seeds Quantitative To be recorded as average of length-breadth of 5-10 random seeds 17 Vine Length (cm) Visual observation Quantitative To be recorded from ground level to the tip of the main stem/vine at peak fruiting stage. 18 Vine Length Standom plants To be recorded as average of same 10 plants at the end of flowering stage. 19 Vine Length (cm) Visual observation Quantitative To be recorded as average of same 10 plants at the end of flowering stage. 19 Vine Length (cm) Visual observation To be recorded as average of same 10 plants at the end of flowering stage. 10 Vine Length (cm) Visual observation To be recorded as number of days from date of sowing/transplanting to	13	Fruit shape	Visual observation	Shaped, 6-Top shaped, 7-Globular, 8- Dumbbellshaped, 9- Kamandal Shaped, 10-Lengthened cylindrical, 11-	To be recorded at marketable stage
14 Fruit skin colour Visual observation 5- others To be recorded at marketable stage 15 Fruit Taste 5 random fruits 1-Sweet, 2-Bitter, 3-Others To be recorded on marketable fruits 16 Seed length-breadth ratio 5 random seeds Quantitative breadth of 5-10 random seeds 17 Vine Length (cm) Visual observation Quantitative fruiting stage. 18 Vine Length (cm) Visual observation Quantitative To be recorded as average of length-breadth of 5-10 random seeds To be recorded from ground level to the tip of the main stem/vine at peak fruiting stage. To be recorded as average of same 10 plants at the end of flowering stage. The branch that arises from the main vine/stem is known as primary branching To be recorded as number of days from date of sowing/transplanting to		1			
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16 Seed length-breadth ratio 5 random seeds Quantitative breadth of 5-10 random seeds  To be recorded from ground level to the tip of the main stem/vine at peak fruiting stage.  To be recorded as average of same 10 plants at the end of flowering stage.  The branch that arises from the main vine/stem is known as primary branching  To be recorded as number of days from date of sowing/transplanting to	15	Fruit Taste	5 random fruits	1-Sweet, 2-Bitter, 3-Others	To be recorded on marketable fruits
To be recorded from ground level to the tip of the main stem/vine at peak fruiting stage.  To be recorded from ground level to the tip of the main stem/vine at peak fruiting stage.  To be recorded as average of same 10 plants at the end of flowering stage.  The branch that arises from the main vine/stem is known as primary branching  To be recorded as number of days from date of sowing/transplanting to					TO be recorded as average of length-
the tip of the main stem/vine at peak fruiting stage.  To be recorded as average of same 10 plants at the end of flowering stage.  The branch that arises from the main vine/stem is known as primary branching  To be recorded as number of days from date of sowing/transplanting to	16	Seed length-breadth ratio	5 random seeds	Quantitative	
17 Vine Length (cm) Visual observation Quantitative fruiting stage.  To be recorded as average of same 10 plants at the end of flowering stage.  The branch that arises from the main vine/stem is known as primary branching  To be recorded as number of days from date of sowing/transplanting to					
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Plants at the end of flowering stage. The branch that arises from the main vine/stem is known as primary branches  5 random plants Quantitative  To be recorded as number of days from date of sowing/transplanting to	17	Vine Length (cm)	Visual observation	Quantitative	
18     branches     5 random plants     Quantitative     branching       To be recorded as number of days from date of sowing/transplanting to		Number of Primary			plants at the end of flowering stage. The branch that arises from the main
To be recorded as number of days from date of sowing/transplanting to	18		5 random plants	Quantitative	
from date of sowing/transplanting to	10	Granenes	5 fandom piants	Zummuttvo	
12   2 m   0 0 m   1 m	19	Days to first fruit harvest	5 random plants	Quantitative	the date of first marketable fruits

				harvest
				To be recorded as number of days
				from date of sowing/transplanting to
				the date of last marketable fruit
20	Days to last fruit harvest	Visual observation	Quantitative	harvest
	Number of marketable			To be recorded as total number of
21	fruit per plants	5 random plants	Quantitative	fruit pickings
	Number of Fruits per			To be recorded as average of same 5
22	Plant	5 random plants	Quantitative	plants
				To be recorded as average of
	Yield of fruits per plants			Cumulative yield of all picking in
23	(Kg)	5 random plants	Quantitative	same 5 plants.
				To be recorded as average of 5-10
24	Fruit length (cm)	5 random fruits	Quantitative	random fruits at marketable stage.
				To be recorded as average of same 5-
25	Fruit width (cm)	5 random fruits	Quantitative	10 fruits at marketable stage