

Plant		Blueberry		490	Primary essential character	
No	Characters	No. of samples	Methods	Rank or measurement unit		Remarks
1	Anthocyanin level in dormant shoots	10 shoots	Observation	0:None 1:Very low 3:Low 5:Intermediate 7:High 9:Very high		Observe central part of one-year-old dormant representative shoots
2	Shoot pubescence	10 shoots	Observation	0:None 1:Very little 3:Little 5:Intermediate 7:Much 9:Very much		Observe base to top of medium-sized growing shoots in August
3	Leaf shape	15 leaves	Measurement	* (integer)		Measure leaf length(L) and width(B) of 15 leaves which derive from fourth to sixth node of every 5 medium-sized growing shoots in August, and calculate L/B x 100
4	Leaf waviness	15 leaves	Observation	0:None 1:Very little 3:Little 5:Intermediate 7:Much 9:Very much		Observe same leaves of ibidem item. Observe degree of leaf waviness
5	Shape of leaf circumference	15 leaves	Observation	1:Round 2:Wavy 3:Round saw 4:Sharp saw 5:Saw		Observe same leaves of ibidem item
6	Shape of corolla	10 flowers	Observation	1:Tube 2:Bell 3:Short pot 4:Long pot		Observe typical flowers
7	Color of flower bud	10 flowers	Observation	1:White 2:Yellow white 3:Green white 4:Peach 5:Red		Observe typical flowers
8	Fruit shape (1)	10 fruits	Measurement	* (integer)		Measure width (D) and length (L) of typical mature, healthy fruits and calculate L/D x 100
9	Fruit shape (2)	10 fruits	Observation	3:Round 5:Intermediate 7:Angular		Observe shape of matured healthy fruits as seen from above
10	Size of calyx	10 fruits	Observation	mm (integer)		Measure length of calyx 2 weeks after the end of flowering

Plant	Blueberry		490	Primary optional character	
No	Characters	No. of samples	Methods	Rank or measurement unit	Remarks
1	Leaf size	15 leaves	Measurement	square cm (integer)	Measure leaf length (L) and width (B) of 15 leaves which derive from fourth to sixth node of every 5 medium-sized growing shoots in August, and calculate $\pi \times L \times B/4$

Plant		Blueberry		490	Secondary essential character	
No	Characters	No. of samples	Methods	Rank or measurement unit		Remarks
1	Time of bud break	2 trees	Measurement	date		Date in which the first 2-3 buds break dormancy
2	Flowering time	2 trees	Measurement	date		The first date of consecutive flower opening days
3	Ripening time	2 trees	Measurement	date		The date by when most mature fruits have been have been harvested
4	Time of leaf fall	2 trees	Measurement	date		The date when 80% or more leaves have fallen
5	Density of fruit cluster	10 clusters	Measurement	berries/cm (round to the 1st decimal place)		Measure the length of cluster (cm) and number of berries, and calculate number of berries per cm
6	Berry cracking	2 trees	Observation	0:None 3:Few 5:Intermediate 7:Much		Observe degree of berry cracking in field
7	Preharvest drop	2 trees	Observation	0:None 3:Little 5:Intermediate 7:Much		Observe degree of preharvest drop in field
8	Period of harvest	2 trees	Measurement	days (integer)		Period from harvest beginning to end
9	Fruit color	10 berries	Observation	1:Light blue 2:Dark blue 3:Black		Observe mature healthy fruits
10	Cold injury	2 trees	Observation	0:None 3:Little 5:Intermediate 7:Much		Observe degree of cold injury in field
11	Drought injury	2 trees	Observation	0:None 3:Little 5:Intermediate 7:Much		Observe degree of drought injury in field

Plant		Blueberry		490	Secondary optional character	
No	Characters	No. of samples	Methods	Rank or measurement unit		Remarks
1	Tree height	2 trees	Measurement	cm (integer)		The height from ground level to tree top
2	Tree width	2 trees	Measurement	cm (integer)		The average tree width measured along the E-W and N-S axes
3	Tree shape	2 trees	Observation	3:Upright 5:Intermediate 7:Spread		Based on the ratio between tree height (H) and width (W), and direction of shoot growth
4	Vigor	2 trees	Observation	1:Very weak 3:Weak 5:Intermediate 7:Strong 9:Very strong		Based on the length and thickness of shoots
5	Fruit size	30 berries	Measurement	g/berry (round to the 1st decimal place)		Measure 30 healthy berries
6	Amount of bloom	10 berries	Observation	0:None 3:little 5:Intermediate 7:Much		Observe mature healthy berries
7	Fruit uniformity	30 berries	Observation	3:Poor 5:Intermediate 7:Good		Observe uniformity of harvested healthy berries
8	Size of fruit stalk marks	10 berries	Measurement	mm (round to the 1st decimal place)		Average of 10 clusters

Plant		Blueberry		490	Tertiary essential character	
No	Characters	No. of samples	Methods	Rank or measurement unit		Remarks
1	Texture	10 berries	Sensory	3:Bad 5:Intermediate 7:Good		Evaluate by eating mature berries. Bad=mealy, Good=jelly-like
2	Juice brix	30 berries	Measurement	% (round to the 1st decimal place)		Measure juice from 30 healthy berries by Refractometer
3	Juice acidity	30 berries	Measurement	pH (round to the 1st decimal place)		Measure juice from 30 healthy berries by pH meter
4	Aroma	10 berries	Sensory	0:None 3:Few 5:Intermediate 7:Much		Evaluate by eating mature berries
5	Fruit quality	10 berries	Sensory	1:Very poor 3:Poor 5:Intermediate 7:Good 9:Excellent		Evaluate overall taste by eating mature berries
6	Thickness of fruit skin	10 berries	Sensory	3:Thin 5:Intermediate 7:Thick		Evaluate thickness of fruit skin by biting mature berries
7	Storability	30 berries	Measurement	days (integer)		Length of time fruits stay fresh at room temperature
8	Yield	2 trees	Measurement	g/tree (integer)		Yield of tree at full productive age