Plant	Bell pepper	446	Primary essential character

No	Characters	No. of samples	Methods	Rank or measurement unit	Remarks
1	Earliness of flowering	10 plants	Observation	1:Extremely early 2:Very early 3:Early 4:Slightly early 5:Intermediate 6:Slightly late 7:Late 8:Very late 9:Extremely late	Date of the first flowering of second nodes
2	Flower color	10 plants	Observation	1:Greenish white 3:White 5:White with spots 7:Purple 9:Purple with spots	
3	Leaf length	10 plants	Measurement	cm (round to the 1st decimal place)	Length from leaf base to leaf apex in the largest leaf on upper sites of first branching at immature fruit time
4	Fruit attitude	10 plants	Observation	1:Erect 2:Semi-drooping 3:Drooping	
5	Immature fruit color	10 fruits	Observation	1:Greenish white 2:Yellow 3:Green 4:Purple	
6	Mature fruit color	10 fruits	Observation	1:Yellow 2:Orange 3:Red 4:Brown 5:Green	
7	Mature fruit length	10 fruits	Measurement	cm (round to the 1st decimal place)	
8	Index of fruit shape	10 fruits	Measurement	% (round to the 1st decimal place)	Ratio of length/the longest diameter of typical mature fruit
9	Shape in longitudinal section of fruit	10 fruits	Observation	1:Oblate 2:Circular 3:Cordate 4:Square 5:Rectangular 6:Trapezoidal 7:Moderately triangular 8:Narrowly triangular 9:Horn shaped	Mature fruit
10	Fruit pungency	10 fruits	Observation	0:Absent 9:Present	Presence of pungency in typical fruit

Plant	Bell pepper	446	Primary optional character

No	Characters	No. of samples	Methods	Rank or measurement unit	Remarks
1	Anthocyanin coloration of hypocotyl	10 plants	Observation	0:Absent 9:Present	
2	Cotyledon size	10 plants	Measurement	cm (round to the 1st decimal place)	Length from base to apex of cotyledon
3	First branching height	10 plants	Measurement	cm (round to the 1st decimal place)	Length from cotyledon to a node of first flowering
4	Stem thickness	10 plants	Measurement	cm (round to the 1st decimal place)	Diameters of branch between the second and third nodes under branching
5	Shortened internode	10 plants	Observation	0:Absent 9:Present	Presence of shortened internode
6	Internode number between the first flower and shortened internodes	10 plants	Observation	1:None 2:One to three 3:More than three	
7	Internode length	10 plants	Measurement	cm (round to the 1st decimal place)	Average length of internodes between the second and forth branchings on primary side shoots
8	Anthocyanin coloration of nodes	10 plants	Observation	0:None 1:Extremely weak 2:Very weak 3:Weak 4:Slightly weak 5:Intermediate 6:Slightly strong 7:Strong 8:Very strong 9:Extremely strong	
9	Hairiness of nodes	10 plants	Observation	0:None 1:Extremely weak 2:Very weak 3:Weak 4:Slightly weak 5:Intermediate 6:Slightly strong 7:Strong 8:Very strong 9:Extremely strong	
10	Plant height	10 plants	Measurement	cm (integer)	At immature fruit time
11	Leaf width	10 plants	Measurement	cm (round to the 1st decimal place)	Width of the largest leaf on upper sites at immature fruit time
12	Intensity of leaf green	10 plants	Observation	3:Light 4:Slightly light 5:Medium 6:Slightly dark 7:Dark	Leaves on upper site of first branching

Plant	Bell pepper	446	Primary optional character

No	Characters	No. of samples	Methods	Rank or measurement unit	Remarks
13	Leaf shape	10 plants	Observation	1:Lanceolate 2:Ovate 3:Broad elliptic	Leaves on upper site of first branching
14	Undulation of leaf margin	10 plants	Observation	0:None 1:Extremely weak 2:Very weak 3:Weak 4:Slightly weak 5:Intermediate 6:Slightly strong 7:Strong 8:Very strong 9:Extremely strong	Leaves on upper site of first branching
15	Leaf blistering	10 plants	Observation	1:Extremely weak 2:Very weak 3:Weak 4:Slightly weak 5:Intermediate 6:Slightly strong 7:Strong 8:Very strong 9:Extremely strong	Leaves on upper site of first branching
16	Leaf profile in cross section	10 plants	Observation	1:Strongly concave 2:Very concave 3:Moderately concave 4:Slightly concave 5:Flat 6:Slightly convex 7:Moderately convex 8:Very convex 9:Strongly convex	Leaves on upper site of first branching
17	Leaf glossiness	10 plants	Observation	1:Extremely weak 2:Very weak 3:Weak 4:Slightly weak 5:Intermediate 6:Slightly strong 7:Strong 8:Very strong 9:Extremely strong	Leaves on upper site of first branching
18	Peduncle attitude	10 plants	Observation	1:Erect 2:Semi-drooping 3:Drooping	
19	Anther anthocyanin coloration	10 flowers	Observation	0:Absent 9:Present	
20	Intensity of fruit color	10 fruits	Observation	1:Extremely light 2:Very light 3:Light 4:Slightly light 5:Medium 6:Slightly dark 7:Dark 8:Very dark 9:Extremely dark	
21	Anthocyanin coloration of immature fruits	10 fruits	Observation	0:Absent 9:Present	
22	Fruit diameter	10 fruits	Measurement	cm (round to the 1st decimal place)	
23	Fruit weight	10 fruits	Measurement	g (round to the 1st decimal place)	
24	Shape in cross section of fruit	10 fruits	Measurement	1:Elliptic 2:Angular 3:Circular	Mature fruits

Plant	Bell pepper	446	Primary optional character

No	Characters	No. of samples	Methods	Rank or measurement unit	Remarks
25	Sinuation of pericarp at fruit basal	10 fruits	Observation	0:None 1:Extremely weak 2:Very weak 3:Weak 4:Slightly weak 5:Intermediate 6:Slightly strong 7:Strong 8:Very strong 9:Extremely strong	Mature fruits
26	Sinuation of pericarp excluding fruit basal part	10 fruits	Observation	0:None 1:Extremely weak 2:Very weak 3:Weak 4:Slightly weak 5:Intermediate 6:Slightly strong 7:Strong 8:Very strong 9:Extremely strong	Mature fruits
27	Fruit surface texture	10 fruits	Observation	1:Smooth or very slightly wrinkled 2:Slightly wrinkled 3:Strongly wrinkled	Mature fruits
28	Intensity of mature fruits	10 fruits	Observation	3:Light 4:Slightly light 5:Medium 6:Slightly dark 7:Dark	Mature fruits
29	Fruit glossiness	10 fruits	Observation	1:Extremely weak 2:Very weak 3:Weak 4:Slightly weak 5:Intermediate 6:Slightly strong 7:Strong 8:Very strong 9:Extremely strong	Mature fruits
30	Depth of stalk cavity	10 fruits	Observation	0:None 1:Extremely shallow 2:Very shallow 3:Shallow 4:Slightly shallow 5:Intermediate 6:Slightly deep 7:Deep 8:Very deep 9:Extremely deep	Mature fruits
31	Shape of fruit apex	10 fruits	Observation	1:Very acute 2:Moderately acute 3:Rounded 4:Moderately depressed 5:Very depressed	Mature fruits
32	Depth of wrinkle on fruit surface	10 fruits	Observation	0:None 1:Extremely shallow 2:Very shallow 3:Shallow 4:Slightly shallow 5:Intermediate 6:Slightly deep 7:Deep 8:Very deep 9:Extremely deep	Mature fruits
33	Number of locules	10 fruits	Observation	1:Predominantly two 2:Equally two and three 3:Predominantly three 4:Equally three and four 5:Predominantly four and more	Mature fruits
34	Thickness of fruit flesh	10 fruits	Measurement	mm (round to the 1st decimal place)	Thickness of fruit flesh at the center of typical mature fruit
35	Stalk length	10 fruits	Measurement	mm (round to the 1st decimal place)	Mature fruits

Plant	Bell pepper	446	Primary optional character

No	Characters	No. of samples	Methods	Rank or measurement unit	Remarks
36	Stalk thickness	10 fruits	Measurement	mm (round to the 1st decimal place)	Mature fruits
37	Shape of calyx	10 fruits	Observation	1:Non enveloping 2:Enveloping	Mature fruits
38	Number of seeds per fruit	10 fruits	Measurement	Seed number (round to the 1st decimal place)	
39	Time of maturity	10 plants	Observation	1:Extremely early 2:Very early 3:Early 4:Slightly early 5:Intermediate 6:Slightly late 7:Late 8:Very late 9:Extremely late	Date of the first maturing fruit

Plant	Bell pepper	446	Secondary optional character

No	Characters	No. of samples	Methods	Rank or measurement unit	Remarks
1	Resistance to tobamovirus	10 plants	Observation	0:None 1:L1 2:L2 3:L3 4:L4	Resistant genes to tobamovirus
2	Resistance to Potato Virus Y	10 plants	Observation	0:None 1:Resistance to pathotype 0 2:Resistance to pathotype 1 3:Resistance to pathotype 1-2	
3	Resistance to Tomato Spotted Wilt Virus	10 plants	Observation	0:Absent 9:Present	Resistance to R0 race
4	Resistance to Cucumber Mosaic Virus	10 plants	Observation	0:None 1:Extremely weak 2:Very weak 3:Weak 4:Slightly weak 5:Intermediate 6:Slightly strong 7:Strong 8:Very strong 9:Extremely strong	Artificial inoculation or natural infection
5	Resistance to Phytophthora blight	10 plants	Observation	0:None 1:Extremely weak 2:Very weak 3:Weak 4:Slightly weak 5:Intermediate 6:Slightly strong 7:Strong 8:Very strong 9:Extremely strong	Medium: Bell-masari, Strong: LS279
6	Resistance to Bacterial spot	10 plants	Observation	0:None 1:Extremely weak 2:Very weak 3:Weak 4:Slightly weak 5:Intermediate 6:Slightly strong 7:Strong 8:Very strong 9:Extremely strong	
7	Resistance to Bacterial wilt	10 plants	Observation	0:None 1:Extremely weak 2:Very weak 3:Weak 4:Slightly weak 5:Intermediate 6:Slightly strong 7:Strong 8:Very strong 9:Extremely strong	Weak: Kyo-Midori, Medium: Mie-Midori, Strong: LS2341

Plant	Bell pepper	446	Tertiary optional character

No	Characters	No. of samples	Methods	Rank or measurement unit	Remarks
1	Degree of pungency	10 plants	Observation	0:None 1:Extremely low 2:Very low 3:Low 4:Slightly low 5:Intermediate 6:Slightly high 7:High 8:Very high 9:Extremely high	Very weak: NuMex Sunrise, Weak: Yatsufusa, Medium: Takanotume, Strong: Habanero