

Plant		Azuki bean		474	Primary essential character	
No	Characters	No. of samples	Methods	Rank or measurement unit		Remarks
1	Main stem length	20 plants	Measurement	cm (integer)		Length from ground level to the top node on the main stem
2	Number of nodes on main stem	20 plants	Measurement	nodes (round to the 1st decimal place)		Number of nodes on the main stem from the primary leaf node to the top node
3	Stem color	Block	Observation	1:Green 9:Purple		Color of the main stem at the unfolding primary leaf stage
4	Pod color	Block	Observation	1:Ivory white 2:Very pale brown 3:Pale brown 4:Slightly pale brown 5:Brown 6:Slightly blackish brown 7:Blackish brown		Color of matured pods
5	Number of seeds per pod	5 plants, 100 pods	Measurement	seeds (round to the 1st decimal place)		Number of seeds per pod at maturity
6	Seed weight	100 seeds, 2 replications	Measurement	g (round to the 1st decimal place)		Average weight of 100 matured seeds with two replications
7	Seed-coat color	Block	Observation	0:Ivory white 1:Yellow 2:Ashy green 3:Pale brown 4:Light red 5:Red 6:Deep red 7:Dark red 8:Gray 9:Black		Seed-coat color at post-maturity, the lighter color is the ground color if seeds have different ones.
8	Flowering date	Block	Observation	date		Date on which 40-50% plants have flowered
9	Maturing date	Block	Observation	date		Date on which 70-80 % pods of all plants have turned into matured pod color
10	Number of branches	20 plants	Measurement	Number per plant (round to the 1st decimal place)		Number of primary branches with two nodes or more and at least one pod

Plant		Azuki bean		474	Primary optional character	
No	Characters	No. of samples	Methods	Rank or measurement unit		Remarks
1	Degree of pubescence	Block	Observation	3:Low 4:Slightly low 5:Intermediate 6:Slightly high 7:High		Degree of pubescence on the main stem
2	Flower color	Block	Observation	3:Pale yellow 4:Slightly pale yellow 5:Yellow 6:Slightly deep yellow 7:Deep yellow		Color of blooming flowers
3	Pod length	5 plants, 100 pods	Measurement	cm (integer)		Length from the base to the top of pods
4	Seed shape	Block	Observation	1:Round 3:Short-cylindrical 5:Cylindrical 7:Long-cylindrical 9:Tapered cylindrical		
5	Lower leaflet shape	Block	Observation	1:Broadly ovate 5:Lanceolate with broad base 7:Lanceolate		Shape of the terminal leaflet on the 3rd to 5th node of the main stem at flowering time
6	Upper leaflet shape	Block	Observation	1:Broadly ovate 5:Lanceolate with broad base 7:Lanceolate		Shape of the terminal leaflet on the upper node of the main stem at pod developing stage

Plant		Azuki bean		474	Secondary essential character	
No	Characters	No. of samples	Methods	Rank or measurement unit		Remarks
1	Lodging tolerance	Block	Observation	1:Very low 3:Low 4:Slightly low 5:Intermediate 6:Slightly high 7:High 9:Very high		Score based on degree of lodged angle of the main stem and lodging area at maturity
2	Virus resistance	Block	Observation	1:Very low 3:Low 4:Slightly low 5:Intermediate 6:Slightly high 7:High 9:Very high		Score based on degree of disease severity by adzuki mosaic virus and cucumber mosaic virus
3	Pubescence shape	Block	Observation	1:Sharp 9:Blunt		Observation by loupe or microscope
4	Climbing habit	Block	Observation	3:Viny 4:Slightly viny 5:Intermediate 6:Slightly non-viny 7:Non-viny		Score based on the degree of climbing of the main stem at pod developing stage

Plant		Azuki bean		474	Secondary optional character
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1	Resistance to brown stem rot	Block	Observation	1:Very low 3:Low 4:Slightly low 5:Intermediate 6:Slightly high 7:High 9:Very high	Score based on the degree of disease severity by <i>Phialophora gregata</i>
2	Resistance to phytophthora stem rot	Block	Observation	1:Very low 3:Low 4:Slightly low 5:Intermediate 6:Slightly high 7:High 9:Very high	Score based on the degree of disease severity by <i>Phytophthora vignae</i>
3	Chilling tolerance	Block	Others	1:Very low 3:Low 4:Slightly low 5:Intermediate 6:Slightly high 7:High 9:Very high	Score based on percentage of pod-setting or yield decreasing under low temperature during the flowering stage
4	Resistance to adzuki bean wilt	Block	Observation	1:Very low 3:Low 4:Slightly low 5:Intermediate 6:Slightly high 7:High 9:Very high	Score based on the degree of disease severity by <i>Fusarium oxysporum</i> f. sp. <i>adzukicola</i>

Plant	Azuki bean		474	Tertiary essential character	
No	Characters	No. of samples	Methods	Rank or measurement unit	Remarks
1	Seed yield	Block	Measurement	kg/a (round to the 1st decimal place)	
2	Ratio of seed coat weight	50 seeds	Calculation	1:Very low 3:Low 4:Slightly low 5:Intermediate 6:Slightly high 7:High 9:Very high	Ratio of seed-coat weight to whole grain