

Genetic diversity and population structure in wild seabuckthorn (*Hippophae salicifolia*) growing in the Uttarakhand region of the Indian Himalayas

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Table S1: Comparative morphological Characteristics observed in *H. salicifolia* collections from different geographical regions of Uttarakhand.

Character	Trait
Mature plant habit	Erect
Branching habit	Dense
Branching of thorns	Thorn-less
Stem shape	Round
Leafiness on thorns	Absent
Mature stem colour	Reddish-Brown
Immature Stem colour	Green
Silver scales on stem	Absent
Hardness of mature stem	Medium
Stellate hair on young branches	Absent
Number of leaves attached to single point	Single
Doral leaf colour	Light green
Leaf tip shape	Acute
Upper leaf surface	Smooth
Silver scales on leaves	Absent
Stellate hair beneath leaves	Absent
Colour of mid-rib	Green
Leaf attached to stem	Sessile
Phyllotaxy	Zigzag
Colour of leaf on ventral side	Green

Table S2: Fisher's exact χ^2 – square test results of leaf and fruits colors of *H. salicifolia*.

Parameter	Dorsal Leaf Color	Ventral Leaf Color	Fruit Color
No. of shades	8	4	10
Df	7	3	9
χ^2 – Value	142	98	153
p-value	<0.001	0.002	<0.001
Df- degrees of freedom; χ^2 - Chi-square			

Fruit Color Shade	Freq.	RHS Color code	Color Description	Shade	Freq.	RHS Color code	Color Description	Shade	Freq.	RHS Color code	Color Description
				Ventral Leaf surface shade				Dorsal Leaf Surface Shade			
	8	11B	Brilliant Yellow						4	133A	Vivid Green
	4	15A	Vivid Yellow		4	130D	Pale Green		7	134A	Greyish Green
	7	15B	Vivid Yellow		2	142D	Yellowish Green		1	134B	Greyish Green
	3	17A	Strong Orange Yellow		2	145D	Brown Green		5	134D	Greyish Green
	4	21B	Vivid Orange		4	148D	Brown Green		4	135B	Greyish Green
	5	22A	Brilliant orange Yellow						3	137A	Greyish Green
	2	23A	Brilliant orange Yellow						2	138A	Greyish Green
	4	N25D	Strong Orange Yellow						1	139A	Greyish Green
	1	26A	Vivid Orange								
	2	27A	Vivid pale Orange								

Fig. S1 Fruit, dorsal and ventral leaf surface shades (Royal Horticultural Society (RHS) colors) observed in seabuckthorn collections from various regions of Uttarakhand.

