

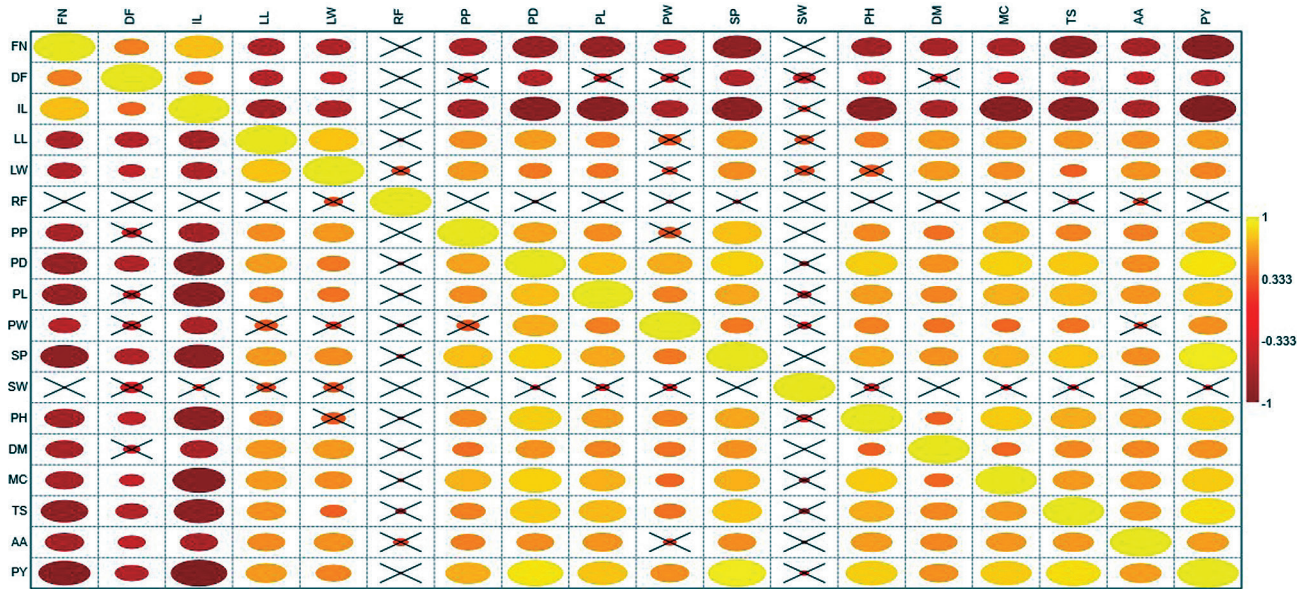


Fig. 1 Biplot analysis of correlation among several horticultural traits (Pooled data).
FN, First fruiting node; DF, Days to 50% flowering; IL, Internodal length; LL, Leaf length; LW, Leaf width; RF, Ridges on fruit; PP, Pods/plant; PD, Pod diameter; PL, Pod length; PW, Pod weight; SP, Seeds/pod; SW, Seed weight; PH, Plant height; DM, Dry matter content; MC, Mucilage content; TS, Total soluble solids; AA, Asorbic acid; PY, Pod yield/plant.

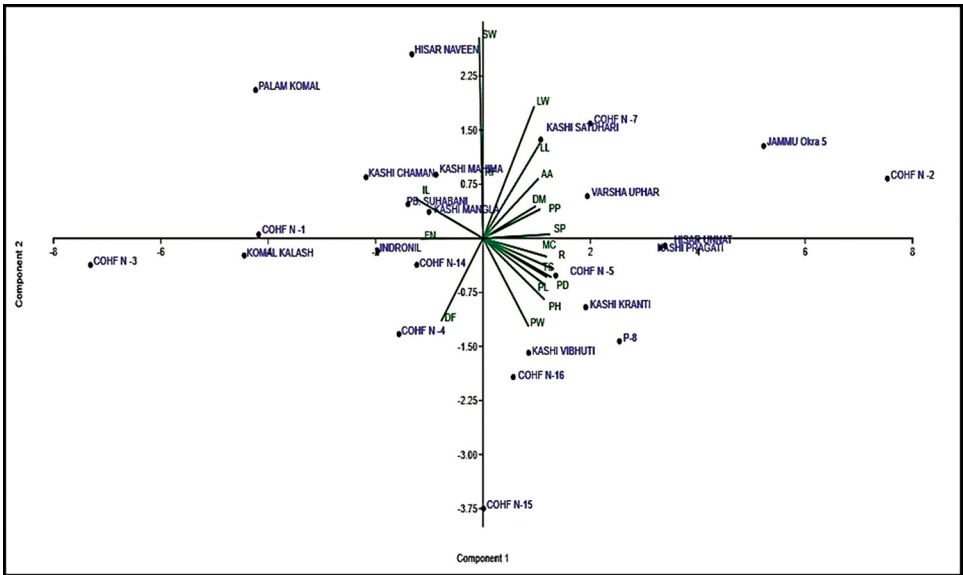


Fig. 2 Graphical representation of PCA (Principal component analysis) for pooled data collected from two years for several horticultural traits.
FN, First fruiting node; DF, Days to 50% flowering; IL, Internodal length; LL, Leaf length; LW, Leaf width; RF, Ridges on fruit; PP, Pods/plant; PD, Pod diameter; PL, Pod length; PW, Pod weight; SP, Seeds/pod; SW, Seed weight; PH, Plant height; DM, Dry matter content; MC, Mucilage content; TS, Total soluble solids; AA, Asorbic acid; PY, Pod yield/plant.

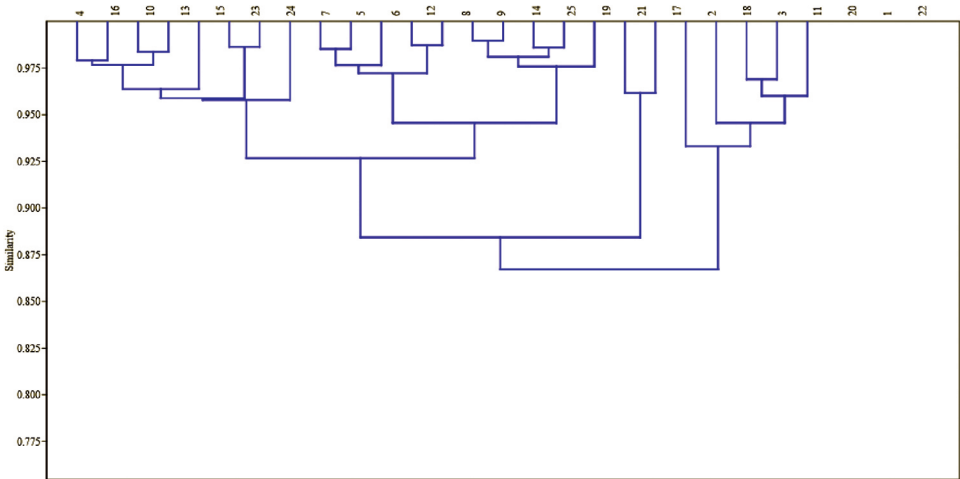


Fig. 3 Dendrogram analysis revealing diversity in horticultural traits.



Supplementary Table 1 Principal component analysis: Eigenvalues and loadings

	Eigenvalues of correlation matrix																	
	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12	PC13	PC14	PC15	PC16	PC17	PC18
Eigenvalues	10.63	1.889	1.337	0.859	0.72	0.627	0.47	0.338	0.306	0.211	0.175	0.145	0.102	0.088	0.059	0.033	0.009	0.002
Proportion	0.591	0.105	0.074	0.048	0.04	0.035	0.026	0.019	0.017	0.012	0.01	0.008	0.006	0.005	0.003	0.002	0.001	0
Cumulative proportion	0.591	0.696	0.77	0.818	0.857	0.892	0.918	0.937	0.954	0.966	0.976	0.984	0.989	0.994	0.998	0.999	1	1
FN	0.26	-0.002	-0.011	-0.104	0.272	0.176	-0.441	0.116	-0.085	0.516	-0.414	0.196	-0.261	0.06	0.02	-0.214	0.025	-0.082
DF	0.175	-0.258	0.316	-0.583	0.282	-0.057	0.022	0.078	-0.277	-0.177	0.196	0.366	0.222	-0.044	-0.043	0.17	-0.058	-0.091
IL	0.282	0.124	-0.032	-0.018	-0.037	0.004	-0.005	0.379	0.096	0.362	0.362	-0.12	0.229	-0.385	-0.087	0.055	0.361	0.363
LL	-0.239	0.297	-0.137	-0.181	0.086	0.021	-0.326	-0.41	0.07	0.107	0.501	0.12	0.107	-0.124	0.231	-0.377	-0.106	-0.074
LW	-0.215	0.412	0.197	-0.254	-0.01	0.136	-0.048	-0.225	0.213	-0.009	-0.125	0.091	-0.373	-0.282	-0.273	0.481	0.102	0.066
RF	0.004	0.194	0.752	0.208	-0.366	0.188	0.055	0.028	0.018	0.125	0.018	0.202	0.163	0.131	-0.072	-0.266	-0.062	-0.02
PP	-0.239	0.09	0.09	-0.137	0.44	0.328	0.395	0.286	0.092	0.093	0.267	-0.25	-0.273	0.33	-0.046	-0.17	0.031	-0.055
PD	-0.286	-0.121	-0.081	0.036	-0.049	0.189	-0.144	0.144	0.037	0.295	0.012	-0.192	0.401	-0.118	-0.302	0.248	-0.205	-0.567
PL	-0.259	-0.145	0.174	-0.1	-0.051	-0.127	0.095	-0.219	-0.639	0.184	-0.094	-0.404	-0.128	-0.293	-0.122	-0.212	0.098	0.108
PW	-0.191	-0.275	-0.16	-0.198	-0.532	0.478	-0.164	0.211	-0.173	-0.015	0.165	0.105	-0.241	0.077	0.256	0.131	-0.015	0.156
SP	-0.28	0.012	-0.117	0.012	0.11	0.061	0.386	0.181	0.071	0.123	-0.279	0.334	0.123	-0.43	0.188	-0.13	-0.436	0.242
SW	0.016	0.628	-0.29	0.041	-0.013	0.134	0.027	0.189	-0.555	-0.18	-0.087	0.148	0.207	0.175	-0.135	0.033	0.043	-0.012
PH	-0.257	-0.191	0.011	0.25	0.173	0.028	-0.393	0.249	0.03	-0.394	0.091	0.162	-0.107	-0.153	-0.505	-0.266	0.014	0.19
DM	-0.22	0.1	-0.051	-0.574	-0.262	-0.294	-0.088	0.217	0.275	-0.045	-0.304	-0.167	0.202	0.224	-0.118	-0.277	0.079	0.117
MC	-0.266	-0.057	0.177	0.103	0.325	0.24	-0.257	-0.147	-0.001	-0.026	-0.198	-0.171	0.43	0.201	0.272	0.254	0.14	0.425
TS	-0.267	-0.121	-0.119	0.11	-0.033	-0.361	0.093	-0.114	-0.08	0.456	0.184	0.378	-0.035	0.417	-0.267	0.201	0.003	0.239
AA	-0.232	0.186	0.242	0.128	0.057	-0.475	-0.263	0.459	-0.107	-0.005	0.095	-0.077	-0.21	-0.041	0.42	0.212	-0.119	-0.139
PY	-0.296	-0.097	-0.036	0.08	0.016	-0.008	0.159	0.023	0.031	-0.03	-0.125	0.334	0.055	-0.121	0.198	-0.1	0.746	-0.342

FN, First fruiting node; DF, Days to 50% flowering; IL, Internodal length; LL, Leaf length; LW, Leaf width; RF, Ridges on fruit; PP, Pods/plant; PD, Pod diameter; PL, Pod length; PW, Pod weight; SP, Seeds/pod; SW, Seed weight; PH, Plant height; DM, Dry matter content; MC, Mucilage content; TS, Total soluble solids; AA, Ascorbic acid; PY, Pod yield/plant; PC, Principal component.



Supplementary Table 2 Pooled analysis of variance for several horticultural traits in okra

Traits	Replication	Genotype	Error	Mean	Range
df	2	24	48		
First flowering node	0.01	3.29	0.01	4.65	2.99–6.65
Days to 50% flowering	1.93	138.03	1.44	48.86	39.50–61.65
Internodal length (cm)	0.06	8.91	0.06	9.74	7.07–13.54
Leaf length	0.11	10.32	0.31	23.48	19.54–26.48
Leaf width	0.45	5.04	0.77	34.14	31.50–37.16
Ridges/fruit	0.01	1.01	0.01	5.24	5.00–7.00
Pods/plant	0.25	24.16	0.18	16.36	12.42–23.54
Pod diameter (cm)	0.00	0.06	0.00	1.52	1.16–1.89
Pod length (cm)	0.02	2.07	0.11	12.21	10.36–13.55
Pod weight (g)	0.05	4.59	0.11	12.70	10.85–15.05
Seeds/pod	0.34	369.12	1.84	59.51	45.65–92.54
100 seed weight (g)	0.00	1.51	0.02	6.01	4.04–7.08
Plant height (cm)	10.21	1124.74	13.42	143.26	99.19–168.45
Dry matter content (%)	0.23	11.96	0.13	14.15	11.65–17.98
Mucilage content (g)	0.00	0.02	0.00	0.36	0.13–0.54
Total soluble solids (°B)	0.10	0.74	0.04	6.96	6.04–7.71
Ascorbic acid (mg/100g)	0.02	2.09	0.09	10.72	9.01–11.88
Pod yield/plant (g)	9.80	5877.08	38.50	204.43	130.85–310.10

