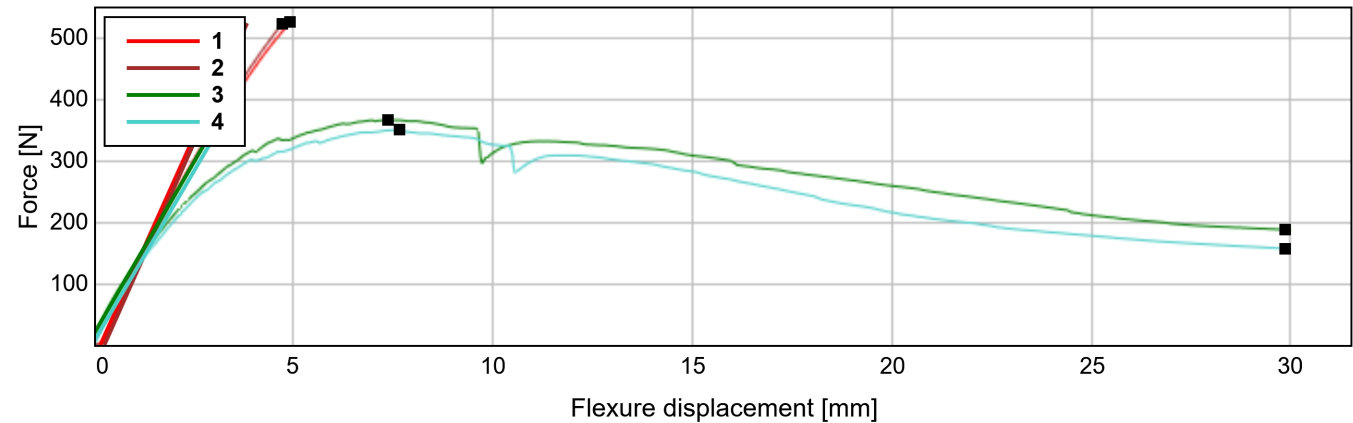


To determine material property contribution to stalk flexural stiffness

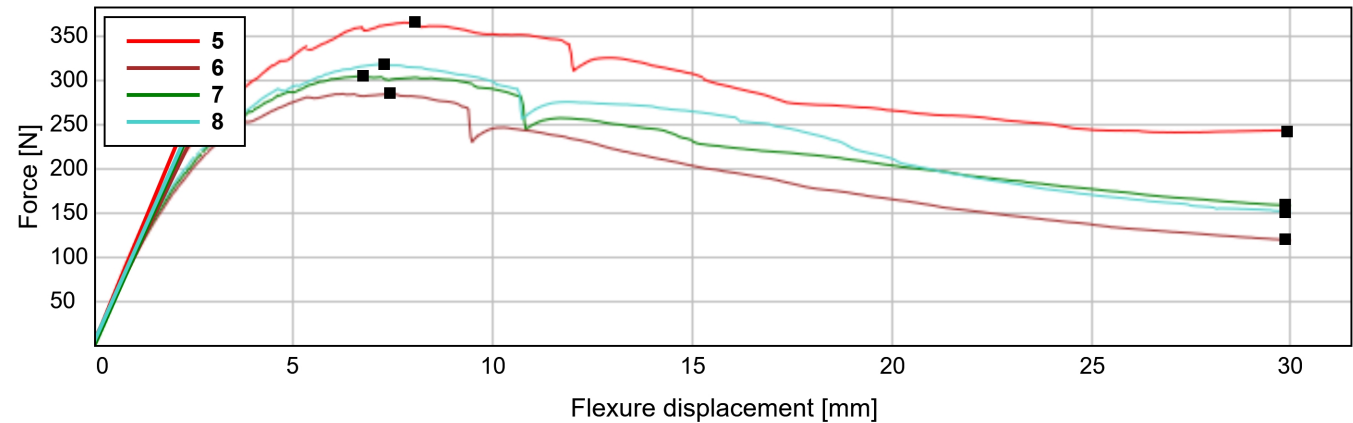
3-Point Bend Testing Protocol for Maize Stalks
Erin Sparks Lab
University of Delaware

Rate 1	1.50 mm/s
Operator	Irene Ikiriko

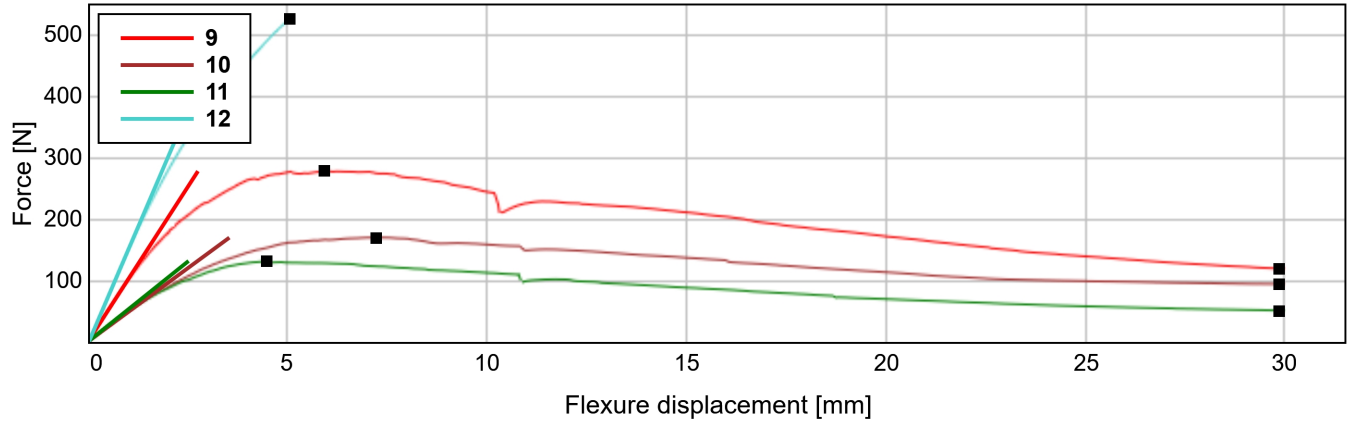
Specimen 1 to 4



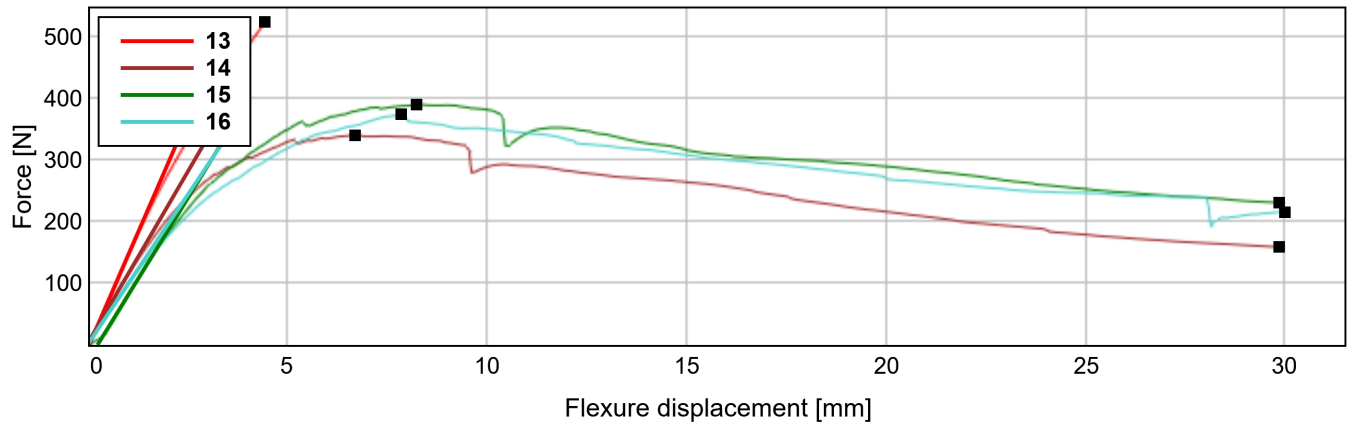
Specimen 5 to 8



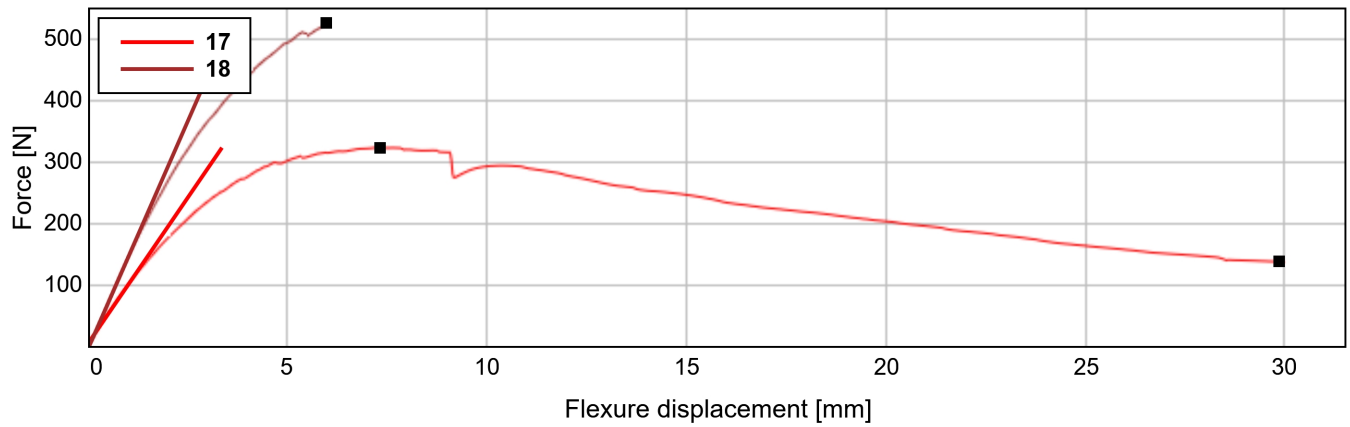
Specimen 9 to 12



Specimen 13 to 16



Specimen 17 to 18



	Genotype	Plant Number	Plot Number
1	CML258	7	234
2	CML258	7	234
3	CML258	3	234
4	CML258	8	234

	Genotype	Plant Number	Plot Number
5	CML258	10	234
6	CML258	12	234
7	CML258	9	234
8	CML258	5	234
9	CML258	2	234
10	CML258	4	234
11	CML258	11	234
12	CML258	1	234
13	CML258	1	236
14	CML258	2	236
15	CML258	3	236
16	CML258	4	236
17	CML258	5	236
18	CML258	7	236

	Whorl Number (use field-based numbering - top down)	Root Sample Number	Vertical Specimen Diameter [mm]
1			26.48
2			26.48
3			23.68
4			23.31
5			24.55
6			21.38
7			23.61
8			22.74
9			21.75
10			19.04
11			17.79
12			27.23
13			28.32
14			21.98
15			23.67
16			22.67
17			21.84
18			24.84

	Horizontal Specimen Diameter [mm]	Specimen Length [mm]	Force at Break (Standard) [N]
1	30.26	300.00	524.57

	Horizontal Specimen Diameter [mm]	Specimen Length [mm]	Force at Break (Standard) [N]
2	30.26	300.00	523.75
3	27.92	300.00	187.65
4	26.82	300.00	156.85
5	28.01	300.00	242.61
6	25.14	300.00	118.95
7	26.66	300.00	158.14
8	26.80	300.00	151.05
9	24.62	300.00	119.52
10	21.93	300.00	94.28
11	20.00	300.00	51.43
12	31.28	300.00	524.05
13	32.83	300.00	522.21
14	25.89	300.00	158.66
15	28.13	300.00	230.52
16	25.44	300.00	216.01
17	24.83	300.00	137.23
18	29.71	300.00	524.11

	Displacement at Break (Standard) [mm]	Flexure displacement at Break (Standard) [mm]	Maximum Force [N]
1	12.49	4.90	524.57
2	5.32	4.74	523.75
3	30.86	29.85	366.10
4	30.93	29.87	350.65
5	29.69	29.93	364.89
6	32.45	29.87	284.30
7	30.20	29.87	304.88
8	30.73	29.87	318.16
9	32.39	29.87	277.88
10	35.20	29.87	169.88
11	36.00	29.87	131.91
12	3.81	5.04	524.05
13	0.75	4.43	522.21
14	32.83	29.87	340.29
15	29.41	29.87	389.39
16	32.47	30.00	372.89
17	31.93	29.87	322.60
18	4.89	5.99	524.11

	Displacement at Break (Standard) [mm]	Flexure displacement at Break (Standard) [mm]	Maximum Force [N]
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	Flexure displacement at Maximum Force [mm]	Maximum Slope (Automatic) [N/mm]
1	4.90	144.45
2	4.74	146.35
3	7.38	111.39
4	7.67	110.57
5	8.06	108.74
6	7.43	93.55
7	6.74	101.35
8	7.25	101.24
9	5.93	100.48
10	7.22	47.67
11	4.46	52.03
12	5.04	151.23
13	4.43	148.81
14	6.71	110.82
15	8.24	105.04
16	7.85	96.64
17	7.34	94.78
18	5.99	147.94