SupplementaryMaterials

Table S1. Semi-quantitative estimate of crystallinity for flax fibers.

Flax ID	TCI	LOI	HBI	I
NW	0.963	1.108	0.930	0.976
A-E	0.981	-	0.942	0.993
A-H	0.949	1.101	0.962	0.986
A-EW	0.957	1.120	0.937	0.982
B-EHA	0.960	-	0.965	0.992
B-HEA	0.948	-	0.979	0.993
B-EAH	0.948	1.109	0.937	0.979

Table S2. Semi-quantitative estimate of crystallinity of sisal fibers.

Sisal ID	TCI	LOI	HBI	I
NW	1.117	1.058	-	-
A-E	1.038	-	-	-
A-H	0.969	1.054	-	-
A-EW	1.120	-	-	-
B-EHA	0.926	-	-	-
B-HEA	0.894	-	-	-
B-EAH	0.917	-	-	-

Table S3. Semi-quantitative estimate of crystallinity of hemp fibers.

Hemp ID	TCI	LOI	HBI	I
NW	1.007	1.090	0.982	0.987
A-E	0.911	-	1.003	0.984
A-H	1.000	1.053	0.995	0.991
A-EW	1.016	1.108	0.989	0.984
B-EHA	0.968	-	0.974	0.995
B-HEA	0.954	-	0.938	0.988
B-EAH	0.962	1.092	0.991	0.986

Table S4. Tensile properties of flax yarns (CoV% is given inside parenthesis).

Fiber ID	P_{max} (N)	f_t (MPa)	E (Mpa)	ε_t (%)
NW	230 (9%)	234 (9%)	9014 (7%)	2.85 (8%)
A-E	187 (8%)	207 (8%)	9128 (8%)	2.55 (8%)
A-H	208 (19%)	244 (19%)	9820 (14%)	2.80 (15%)
A-EW	200 (15%)	220 (15%)	8564 (7%)	2.79 (10%)
B-EHA	323 (5%)	305 (5%)	10216 (4%)	3.25 (6%)
B-HEA	341 (6%)	336 (6%)	10164 (5%)	3.45 (7%)
B-EAH	348 (6%)	366 (6%)	10478 (7%)	3.57 (7%)

Table S5. Tensile properties of sisal yarns (CoV% is given inside parenthesis).

Fiber ID	P_{max} (N)	f_t (Mpa)	E (Mpa)	ε_t (%)
NW	909 (14%)	238 (14%)	6373 (7%)	3.77 (7%)
A-E	679 (10%)	246 (11%)	6931 (7%)	3.71 (8%)
A-H	697 (10%)	221 (11%)	6009 (10%)	3.79 (4%)
A-EW	738 (12%)	220 (12%)	5621 (6%)	4.02 (8%)
B-EHA	883 (17%)	302 (18%)	8127 (11%)	3.86 (6%)
B-HEA	727 (12%)	246 (13%)	6384 (6%)	3.97 (13%)
B-EAH	1027 (12%)	291 (12%)	7036 (5%)	4.02 (7%)

Table S6. Tensile properties of hemp yarns (CoV% is given inside parenthesis).

Fiber ID	P_{max} (N)	f_t (MPa)	E (MPa)	ε_t (%)
NW	161 (14%)	221 (14%)	9060 (10%)	2.68 (10%)
A-E	103 (6%)	181 (6%)	9776 (13%)	2.28 (16%)
A-H	155 (17%)	211 (17%)	8475 (18%)	2.65 (9%)
A-EW	140 (17%)	261 (17%)	10507 (11%)	2.68 (6%)
B-EHA	191 (13%)	312 (13%)	12715 (8%)	2.81 (10%)
B-HEA	104 (11%)	171 (11%)	9217 (12%)	2.35 (15%)
B-EAH	192 (23%)	337 (23%)	12430 (15%)	2.77 (9%)