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Appendix
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Shredding corn stubble during harvest: Insights from four years of on-farm experiments

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Table A1: Corn stubble shredding intensity at the Zeutern site (first year of field trials), relative frequencies per rating level (N=450)

Treatment[1)]	Block	Level of corn stubble shredding intensity in %				
		Non-overrun stubble				
		1	2	3	4	5
Single-step method	A	78.0	12.0	2.0	2.0	6.0
	B	100.0	0.0	0.0	0.0	0.0
	C	82.0	8.0	0.0	4.0	6.0
	Mean	86.7	6.7	0.7	2.0	4.0
Two-step method	A	86.0	2.0	2.0	0.0	10.0
	B	98.0	0.0	0.0	2.0	0.0
	C	78.0	4.0	2.0	0.0	16.0
	Mean	87.3	2.0	1.3	0.7	8.7
Control	A	0.0	4.0	0.0	2.0	94.0
	B	0.0	6.0	0.0	0.0	94.0
	C	2.0	14.0	2.0	12.0	70.0
	Mean	0.7	8.0	0.7	4.7	86.0

[1]) Single-step method: HS3 corn header equipped with flail knives, operating at the lowest possible cutting height; Two-step method: HS3 corn header equipped with standard knives at a cutting height of 15–25 cm, followed by a tractor-driven flail mower; Control: HS3 corn header with standard knives at a cutting height of 15–25 cm, no additional corn stubble treatment.

Table A2: Corn stubble shredding intensity at the Steinheim site (first year of field trials), relative frequencies per rating level (N=480)

Treatment[1)]	Block	Level of corn stubble shredding intensity in %									
		Non-overrun stubble					Overrun stubble				
		1	2	3	4	5	1	2	3	4	5
Single-step method	A	36.7	10.0	6.7	0.0	46.7	53.3	0.0	13.3	0.0	33.3
	B	76.7	0.0	0.0	3.3	20.0	86.7	0.0	0.0	0.0	13.3
	C	50.0	3.3	0.0	6.7	40.0	43.3	0.0	0.0	13.3	43.3
	Mean	54.4	4.4	2.2	3.3	35.6	61.1	0.0	4.4	4.4	30.0
Two-step method	A	63.3	13.3	3.3	0.0	20.0	50.0	6.7	13.3	0.0	30.0
	B[2)]	(23.3)	(0.0)	(0.0)	(3.3)	(73.3)	(6.7)	(0.0)	(6.7)	(0.0)	(86.7)
	C	40.0	3.3	0.0	6.7	50.0	46.7	0.0	0.0	3.3	50.0
	Mean	51.7	8.3	1.7	3.4	35.0	48.3	3.3	6.7	1,7	40.0
Control	A	0.0	0.0	0.0	0.0	100.0	26.7	13.3	33.3	0.0	26.7
	B	0.0	0.0	0.0	0.0	100.0	0.0	0.0	16.7	0.0	83.3
	C	0.0	0.0	0.0	0.0	100.0	3.3	10.0	13.3	0.0	73.3
	Mean	0.0	0.0	0.0	0.0	100.0	10.0	7.8	21.1	0.0	61.1

[1]) Single-step method: HS3 corn header equipped with flail knives, operating at the lowest possible cutting height; Two-step method: HS3 corn header equipped with standard knives at a cutting height of 15–25 cm, followed by a tractor-driven flail mower; Control: HS3 corn header with standard knives at a cutting height of 15–25 cm, no additional corn stubble treatment.

[2]) Outlier not included in the calculation of the mean.

Table A3: Corn stubble shredding intensity at the Bückeburg site (second year of field trials), relative frequencies per rating level (N=920)

Treatment[1)]	Block	Level of corn stubble shredding intensity in %									
		Non-overrun stubble					Overrun stubble				
		1	2	3	4	5	1	2	3	4	5
Single-step method	A	95.0	5.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0
	B	82.5	2.5	0.0	0.0	15.0	97.5	0.0	0.0	0.0	2.5
	C	85.0	5.0	0.0	10.0	0.0	90.0	0.0	0.0	10.0	0.0
	D	90.0	0.0	0.0	0.0	10.0	90.0	0.0	0.0	0.0	10.0
	E	90.0	0.0	0.0	0.0	10.0	100.0	0.0	0.0	0.0	0.0
	F	90.0	0.0	0.0	0.0	10.0	95.0	0.0	0.0	0.0	5.0
	Mean	88.8	2.1	0.0	1.7	7.5	95.4	0.0	0.0	1.7	2.9
Two-step method	A	90.0	5.0	0.0	5.0	0.0	2.5	2.5	32.5	0.0	62.5
	B	87.5	0.0	0.0	2.5	10.0	30.0	5.0	25.0	0.0	40.0
	C	100.0	0.0	0.0	0.0	0.0	10.0	0.0	20.0	5.0	65.0
	D	75.0	10.0	0.0	0.0	15.0	5.0	5.0	30.0	0.0	60.0
	E[2)]	(35.0)	(5.0)	(0.0)	(15.0)	(45.0)	(15.0)	(0.0)	(25.0)	(0.0)	(60.0)
	F	70.0	0.0	0.0	0.0	30.0	10.0	5.0	30.0	0.0	55.0
	Mean	84.5	3.0	0.0	1.5	11.0	11.5	3.5	27.5	1.0	56.5
Control	A	0.0	0.0	5.0	27.5	67.5	17.5	2.5	7.5	10.0	62.5
	B	0.0	0.0	0.0	10.0	90.0	2.5	5.0	25.0	0.0	67.5
	C	0.0	0.0	0.0	0.0	100.0	0.0	5.0	20.0	0.0	75.0
	D	0.0	0.0	0.0	5.0	95.0	0.0	0.0	30.0	0.0	70.0
	E	0.0	0.0	0.0	0.0	100.0	0.0	0.0	70.0	0.0	30.0
	F	0.0	0.0	0.0	20.0	80.0	5.0	0.0	35.0	0.0	60.0
	Mean	0.0	0.0	0.8	10.4	88.8	4.2	2.1	31.3	1.7	60.8

[1)] Single-step method: HS3 corn header equipped with flail knives, operating at the lowest possible cutting height; Two-step method: HS3 corn header equipped with standard knives at a cutting height of 15–25 cm, followed by a tractor-driven flail mower; Control: HS3 corn header with standard knives at a cutting height of 15–25 cm, no additional corn stubble treatment.
[2)] Outlier not included in the calculation of the mean.

Table A4: Corn stubble shredding intensity at the Stettfeld site (second year of field trials), relative frequencies per rating level (N=960)

Treatment[1)]	Block	Level of corn stubble shredding intensity in %									
		Non-overrun stubble					Overrun stubble				
		1	2	3	4	5	1	2	3	4	5
Two-step method	A	62.5	15.0	7.5	5.0	10.0	15.0	2.5	2.5	7.5	72.5
	B	47.5	10.0	5.0	5.0	32.5	15.0	2.5	5.0	0.0	77.5
	C	60.0	20.0	10.0	0.0	10.0	20.0	0.0	25.0	2.5	52.5
	D	17.5	40.0	22.5	7.5	12.5	7.5	2.5	5.0	2.5	82.5
	E	37.5	57.5	0.0	2.5	2.5	5.0	2.5	0.0	7.5	85.0
	F	45.0	30.0	7.5	7.5	10.0	5.0	10.0	5.0	2.5	77.5
	Mean	45.0	28.8	8.8	4.6	12.9	11.3	3.3	7.1	3.8	74.6
Control	A	0.0	0.0	0.0	0.0	100.0	22.5	2.5	0.0	0.0	75.0
	B	0.0	0.0	0.0	0.0	100.0	32.5	0.0	5.0	0.0	62.5
	C	0.0	2.5	2.5	0.0	95.0	12.5	0.0	10.0	0.0	77.5
	D	0.0	0.0	0.0	0.0	100.0	12.5	5.0	12.5	0.0	70.0
	E	0.0	0.0	0.0	0.0	100.0	12.5	2.5	10.0	0.0	75.0
	F	2.5	0.0	2.5	0.0	95.0	12.5	0.0	2.5	0.0	85.0
	Mean	0.4	0.4	0.8	0.0	98.3	17.5	1.7	6.7	0.0	74.2

[1)] Single-step method: HS3 corn header equipped with flail knives, operating at the lowest possible cutting height; Two-step method: HS3 corn header equipped with standard knives at a cutting height of 15–25 cm, followed by a tractor-driven flail mower; Control: HS3 corn header with standard knives at a cutting height of 15–25 cm, no additional corn stubble treatment.

Table A5: Corn stubble shredding intensity at the Kraichtal site (third year of field trials), relative frequencies per rating level (N=680)

Treatment[1)]	Block	Level of corn stubble shredding intensity in %									
		Non-overrun stubble					Overrun stubble				
		1	2	3	4	5	1	2	3	4	5
Single-step method	A[2)]	(0.0)	(5.0)	(0.0)	(0.0)	(95.0)	(50.0)	(0.0)	(0.0)	(0.0)	(50.0)
	B	55.0	10.0	0.0	5.0	30.0	85.0	0.0	0.0	0.0	15.0
	C	80.0	0.0	0.0	0.0	20.0	85.0	0.0	5.0	0.0	10.0
	D	80.0	5.0	5.0	0.0	10.0	95.0	0.0	0.0	0.0	5.0
	E	60.0	10.0	0.0	15.0	15.0	75.0	0.0	0.0	5.0	20.0
	F	45.0	5.0	5.0	5.0	40.0	95.0	0.0	0.0	0.0	5.0
	Mean	64.0	6.0	2.0	5.0	23.0	87.0	0.0	1.0	1.0	11.0
Two-step method	A	90.0	0.0	0.0	0.0	10.0	75.0	5.0	15.0	0.0	5.0
	B	90.0	0.0	0.0	0.0	10.0	45.0	5.0	5.0	0.0	45.0
	C	90.0	0.0	5.0	0.0	5.0	35.0	0.0	0.0	0.0	65.0
	D	85.0	0.0	0.0	0.0	15.0	20.0	10.0	5.0	5.0	60.0
	E	85.0	0.0	0.0	0.0	15.0	50.0	10.0	5.0	0.0	35.0
	F	85.0	0.0	0.0	0.0	15.0	40.0	0.0	0.0	0.0	60.0
	Mean	87.5	0.0	0.8	0.0	11.7	44.2	5.0	5.0	0.8	45.0
Control	A	0.0	5.0	5.0	0.0	90.0	15.0	0.0	30.0	0.0	55.0
	B	0.0	0.0	0.0	10.0	90.0	55.0	0.0	10.0	0.0	35.0
	C	5.0	0.0	5.0	0.0	90.0	40.0	0.0	5.0	0.0	55.0
	D	0.0	0.0	5.0	0.0	95.0	30.0	0.0	20.0	0.0	50.0
	E	0.0	0.0	0.0	0.0	100.0	35.0	5.0	0.0	0.0	60.0
	F	0.0	0.0	0.0	0.0	100.0	35.0	0.0	5.0	0.0	60.0
	Mean	0.8	0.8	2.5	1.7	94.2	35.0	0.8	11.7	0.0	52.5

[1)] Single-step method: HS3 corn header equipped with flail knives, operating at the lowest possible cutting height; Two-step method: HS3 corn header equipped with standard knives at a cutting height of 15–25 cm, followed by a tractor-driven flail mower; Control: HS3 corn header with standard knives at a cutting height of 15–25 cm, no additional corn stubble treatment.
[2)] Outlier not included in the calculation of the mean.

Table A6: Corn stubble shredding intensity at the Timmaspe site (third year of field trials), relative frequencies per rating level (N=600)

Treatment[1)]	Block	Level of corn stubble shredding intensity in %									
		Non-overrun stubble					Overrun stubble				
		1	2	3	4	5	1	2	3	4	5
Single-step method	A	35.0	10.0	10.0	0.0	45.0	65.0	0.0	0.0	0.0	35.0
	B	40.0	0.0	10.0	5.0	45.0	70.0	10.0	0.0	0.0	20.0
	C	40.0	5.0	10.0	0.0	45.0	65.0	5.0	0.0	0.0	30.0
	D	30.0	15.0	5.0	0.0	50.0	55.0	0.0	5.0	5.0	35.0
	E	40.0	10.0	5.0	0.0	45.0	80.0	0.0	0.0	0.0	20.0
	Mean	37.0	8.0	8.0	1.0	46.0	67.0	3.0	1.0	1.0	28.0
Two-step method	A	65.0	0.0	0.0	5.0	30.0	45.0	0.0	10.0	5.0	40.0
	B	85.0	0.0	0.0	0.0	15.0	30.0	5.0	20.0	5.0	40.0
	C	70.0	5.0	0.0	0.0	25.0	20.0	5.0	15.0	0.0	60.0
	D	75.0	0.0	0.0	0.0	25.0	45.0	15.0	0.0	0.0	40.0
	E	85.0	0.0	0.0	0.0	15.0	40.0	5.0	15.0	0.0	40.0
	Mean	76.0	1.0	0.0	1.0	22.0	36.0	6.0	12.0	2.0	44.0
Control	A	0.0	0.0	0.0	0.0	100.0	55.0	0.0	0.0	0.0	45.0
	B	0.0	0.0	0.0	0.0	100.0	30.0	0.0	20.0	0.0	50.0
	C	0.0	0.0	0.0	10.0	90.0	10.0	0.0	0.0	10.0	80.0
	D	0.0	0.0	5.0	0.0	95.0	65.0	5.0	5.0	0.0	25.0
	E	0.0	0.0	0.0	0.0	100.0	35.0	5.0	15.0	0.0	45.0
	Mean	0.0	0.0	1.0	2.0	97.0	39.0	2.0	8.0	2.0	49.0

[1)] Single-step method: HS3 corn header equipped with flail knives, operating at the lowest possible cutting height; Two-step method: HS3 corn header equipped with standard knives at a cutting height of 15–25 cm, followed by a tractor-driven flail mower; Control: HS3 corn header with standard knives at a cutting height of 15–25 cm, no additional corn stubble treatment.

Table A7: Corn stubble shredding intensity at the Wöbs site (fourth year of field trials), relative frequencies per rating level (N=440)

Treatment[1)]	Block	Level of corn stubble shredding intensity in %									
		Non-overrun stubble					Overrun stubble				
		1	2	3	4	5	1	2	3	4	5
Single-step method	A	95.0	0.0	0.0	0.0	5.0	100.0	0.0	0.0	0.0	0.0
	B	60.0	20.0	0.0	0.0	20.0	95.0	0.0	0.0	0.0	5.0
	C[2)]	(20.0)	(5.0)	(20.0)	(25.0)	(30.0)	(85.0)	(0.0)	(0.0)	(0.0)	(15.0)
	D	70.0	10.0	5.0	0.0	15.0	100.0	0.0	0.0	0.0	0.0
	E	80.0	0.0	5.0	5.0	10.0	80.0	0.0	5.0	0.0	15.0
	F	60.0	25.0	0.0	10.0	5.0	95.0	0.0	0.0	5.0	0.0
	Mean	73.0	11.0	2.0	3.0	11.0	94.0	0.0	1.0	1.0	4.0
Control	A	0.0	0.0	0.0	0.0	100.0	35.0	0.0	10.0	0.0	55.0
	B	0.0	0.0	0.0	0.0	100.0	10.0	15.0	25.0	0.0	50.0
	C	0.0	0.0	0.0	0.0	100.0	20.0	0.0	15.0	0.0	65.0
	D	5.0	0.0	0.0	0.0	95.0	30.0	0.0	0.0	10.0	60.0
	E	0.0	0.0	0.0	0.0	100.0	10.0	0.0	0.0	15.0	75.0
	F	0.0	0.0	0.0	0.0	100.0	40.0	0.0	15.0	20.0	25.0
	Mean	0.8	0.0	0.0	0.0	99.2	24.2	2.5	10.8	7.5	55.0

[1)] Single-step method: HS3 corn header equipped with flail knives, operating at the lowest possible cutting height; Two-step method: HS3 corn header equipped with standard knives at a cutting height of 15–25 cm, followed by a tractor-driven flail mower; Control: HS3 corn header with standard knives at a cutting height of 15–25 cm, no additional corn stubble treatment.
[2)] Outlier not included in the calculation of the mean.

Table A8: Mean and standard deviation of the solid corn stubble segment height at the Zeutern (first year of field trials) site (N=450)

Treatment[1)]	Block	Solid stubble height in cm	
		Non-overrun stubble	
		Mean	SD
Single-step method	A	2.8	1.8
	B	1.7	1.5
	C	4.0	2.8
	Mean	2.8	2.3
Two-step method	A	4.5	4.3
	B	2.6	1.5
	C	8.1	5.9
	Mean	5.1	4.9
Control	A	18.4	1.5
	B	17.9	2.8
	C	14.8	4.4
	Mean	17.0	3.5

[1)] Single-step method: HS3 corn header equipped with flail knives, operating at the lowest possible cutting height; Two-step method: HS3 corn header equipped with standard knives at a cutting height of 15–25 cm, followed by a tractor-driven flail mower; Control: HS3 corn header with standard knives at a cutting height of 15–25 cm, no additional corn stubble treatment.

Table A9: Mean and standard deviation of the solid corn stubble segment height at the Steinheim (first year of field trials) site (N=480)

Treatment[1)]	Block	Solid stubble height in cm			
		Non-overrun stubble		overrun stubble	
		Mean	SD	Mean	SD
Single-step method	A	8.4	9.6	5.8	6.9
	B	2.5	1.8	2.1	1.6
	C	5.5	1.7	5.4	1.6
	Mean	5.5	6.2	4.4	4.5
Two-step method	A	3.0	2.8	6.1	4.9
	B[2)]	(7.2)	(2.7)	(21.1)	(5.1)
	C	5.1	2.7	6.3	3.6
	Mean	4.0	2.9	6.2	4.3
Control	A	21.8	1.7	21.0	2.1
	B	22.7	2.4	24.6	2.8
	C	21.9	1.3	22.4	1.7
	Mean	22.1	1.9	22.9	2.7

[1]) Single-step method: HS3 corn header equipped with flail knives, operating at the lowest possible cutting height; Two-step method: HS3 corn header equipped with standard knives at a cutting height of 15–25 cm, followed by a tractor-driven flail mower; Control: HS3 corn header with standard knives at a cutting height of 15–25 cm, no additional corn stubble treatment.
[2]) Outlier not included in the calculation of the mean.

Table A10: Total corn stubble height and solid stubble segment height at the Bückeburg site (second year of field trials), mean and standard deviation (N=920)

Treatment[1)]	Block	Corn stubble height in cm			
		Non-overrun stubble		Overrun stubble	
		Total	Solid	Total	Solid
Single-step method	A	6.0 ± 1.7	0.2 ± 1.1	5.3 ± 1.8	0.0 ± 0.0
	B	5.6 ± 2.8	1.0 ± 2.3	5.1 ± 3.2	0.1 ± 0.6
	C	9.7 ± 1.4	1.1 ± 2.9	6.1 ± 3.3	0.6 ± 1.7
	D	5.3 ± 2.4	0.5 ± 1.5	4.1 ± 2.8	0.6 ± 1.9
	E	8.7 ± 1.8	0.5 ± 1.5	6.5 ± 2.6	0.0 ± 0.0
	F	6.7 ± 1.0	0.6 ± 1.7	4.0 ± 3.3	0.5 ± 2.0
	Mean	6.7 ± 2.5	0.6 ± 1.9	5.2 ± 2.9	0.2 ± 1.2
Two-step method	A	7.5 ± 1.5	0.8 ± 2.2	14.9 ± 2.1	12.6 ± 5.1
	B	7.8 ± 2.8	1.6 ± 3.6	14.0 ± 4.1	9.5 ± 8.2
	C	8.3 ± 1.3	0.0 ± 0.0	16.6 ± 5.4	15.3 ± 6.6
	D	6.9 ± 1.7	1.7 ± 3.2	15.8 ± 2.2	15.8 ± 2.2
	E[2)]	(10.2 ± 1.1)	(5.1 ± 4.5)	(16.2 ± 2.9)	(14.3 ± 6.5)
	F	8.9 ± 1.6	1.4 ± 2.8	16.4 ± 1.5	13.0 ± 5.9
	Mean	7.8 ± 2.0	1.1 ± 2.8	15.2 ± 3.5	12.6 ± 6.5
Control	A	14.0 ± 1.4	14.0 ± 1.4	15.5 ± 3.3	12.3 ± 6.8
	B	14.9 ± 1.9	14.9 ± 1.9	17.3 ± 1.5	15.5 ± 4.5
	C	17.3 ± 1.5	17.3 ± 1.5	19.4 ± 1.7	17.8 ± 5.1
	D	14.5 ± 1.0	14.5 ± 1.0	17.4 ± 1.6	15.0 ± 4.0
	E	15.7 ± 1.4	15.7 ± 1.4	18.0 ± 1.3	17.4 ± 1.9
	F	13.7 ± 1.1	13.7 ± 1.1	15.8 ± 2.1	14.4 ± 4.7
	Mean	14.9 ± 1.8	14.9 ± 1.8	17.0 ± 2.5	15.0 ± 5.3

[1]) Single-step method: HS3 corn header equipped with flail knives, operating at the lowest possible cutting height; Two-step method: HS3 corn header equipped with standard knives at a cutting height of 15–25 cm, followed by a tractor-driven flail mower; Control: HS3 corn header with standard knives at a cutting height of 15–25 cm, no additional corn stubble treatment.
[2]) Outlier not included in the calculation of the mean.

Table A11: Total corn stubble height and solid stubble segment height at the Stettfeld site (second year of field trials), mean and standard deviation (N=960)

Treatment[1)]	Block	Corn stubble height in cm			
		Non-overrun stubble		Overrun stubble	
		Total	Solid	Total	Solid
Two-step method	A	4.9 ± 1.0	1.6 ± 2.2	13.3 ± 2.2	8.7 ± 5.7
	B	8.9 ± 2.2	2.9 ± 3.1	14.7 ± 2.0	10.5 ± 5.6
	C	8.0 ± 3.2	2.5 ± 3.2	13.0 ± 3.5	5.6 ± 4.4
	D	7.2 ± 3.7	4.6 ± 2.4	14.1 ± 4.1	11.0 ± 5.8
	E	5.4 ± 2.4	3.0 ± 2.3	15.7 ± 3.6	14.1 ± 5.3
	F	4.5 ± 1.9	2.4 ± 2.3	16.3 ± 1.5	13.4 ± 5.6
	Mean	6.5 ± 3.0	2.8 ± 2.8	14.5 ± 3.2	10.5 ± 6.1
Control	A	15.3 ± 2.0	15.3 ± 2.0	13.3 ± 1.9	6.4 ± 5.2
	B	14.9 ± 1.6	14.7 ± 2.2	13.6 ± 2.2	6.1 ± 5.9
	C	15.8 ± 1.1	15.8 ± 1.1	15.7 ± 1.9	13.5 ± 6.1
	D	16.6 ± 2.2	16.6 ± 2.2	15.8 ± 2.6	12.1 ± 8.6
	E	17.6 ± 1.5	17.4 ± 2.1	15.9 ± 2.5	10.5 ± 6.6
	F	15.6 ± 1.8	15.1 ± 7.0	15.2 ± 2.3	11.5 ± 6.4
	Mean	16.0 ± 1.9	15.8 ± 3.5	14.9 ± 2.5	10.0 ± 7.1

[1]) Single-step method: HS3 corn header equipped with flail knives, operating at the lowest possible cutting height; Two-step method: HS3 corn header equipped with standard knives at a cutting height of 15–25 cm, followed by a tractor-driven flail mower; Control: HS3 corn header with standard knives at a cutting height of 15–25 cm, no additional corn stubble treatment.

Table A12: Total corn stubble height and solid stubble segment height at the Kraichtal site (third year of field trials), mean and standard deviation (N=680)

Treatment[1)]	Block	Corn stubble height in cm			
		Non-overrun stubble		Overrun stubble	
		Total	Solid	Total	Solid
Single-step method	A[2)]	(10.6 ± 1.9)	(7.8 ± 1.4)	(8.6 ± 3.3)	(5.3 ± 2.7)
	B	10.0 ± 1.7	5.2 ± 2.9	6.6 ± 3.0	1.2 ± 2.1
	C	7.0 ± 2.0	5.1 ± 1.5	6.4 ± 2.3	3.6 ± 1.5
	D	8.1 ± 2.2	3.6 ± 2.2	5.0 ± 2.6	1.1 ± 1.4
	E	7.2 ± 1.7	3.5 ± 2.5	6.5 ± 1.3	2.7 ± 2.0
	F	7.7 ± 2.3	4.1 ± 2.0	5.8 ± 2.3	1.4 ± 1.9
	Mean	8.0 ± 2.2	4.3 ± 2.4	6.1 ± 2.4	2.0 ± 2.0
Two-step method	A	7.7 ± 1.5	4.6 ± 1.9	8.8 ± 2.7	4.8 ± 4.1
	B	6.6 ± 3.1	2.5 ± 3.0	9.8 ± 4.4	4.9 ± 4.5
	C	7.1 ± 1.8	3.1 ± 1.3	10.0 ± 2.8	6.6 ± 3.9
	D	8.3 ± 1.2	2.5 ± 2.4	10.8 ± 2.4	7.7 ± 4.8
	E	8.4 ± 2.0	2.7 ± 2.2	9.3 ± 2.7	4.3 ± 3.9
	F	7.1 ± 2.2	3.4 ± 2.4	10.5 ± 4.1	7.1 ± 4.1
	Mean	7.5 ± 2.1	3.1 ± 2.3	9.9 ± 3.3	5.9 ± 4.4
Control	A	13.2 ± 0.8	13.1 ± 0.8	12.8 ± 2.5	6.7 ± 3.7
	B	12.9 ± 0.6	12.9 ± 0.6	11.7 ± 2.9	5.4 ± 5.5
	C	12.7 ± 1.5	12.1 ± 2.7	11.2 ± 3.1	8.1 ± 4.6
	D	13.0 ± 1.0	13.0 ± 1.0	11.2 ± 2.6	6.9 ± 4.8
	E	11.8 ± 1.1	11.8 ± 1.1	10.8 ± 2.4	7.2 ± 5.4
	F	12.2 ± 1.3	11.4 ± 1.9	11.7 ± 1.2	6.0 ± 4.7
	Mean	12.6 ± 1.2	12.4 ± 1.6	11.5 ± 2.5	6.7 ± 4.8

[1]) Single-step method: HS3 corn header equipped with flail knives, operating at the lowest possible cutting height; Two-step method: HS3 corn header equipped with standard knives at a cutting height of 15–25 cm, followed by a tractor-driven flail mower; Control: HS3 corn header with standard knives at a cutting height of 15–25 cm, no additional corn stubble treatment.
[2]) Outlier not included in the calculation of the mean.

Table A13: Total corn stubble height and solid stubble segment height at the Timmaspe site (third year of field trials), mean and standard deviation (N=600)

Treatment[1)]	Block	Corn stubble height in cm			
		Non-overrun stubble		Overrun stubble	
		Total	Solid	Total	Solid
Single-step method	A	9.6 ± 1.9	7.0 ± 4.0	9.2 ± 3.2	4.1 ± 3.4
	B	11.5 ± 4.8	6.2 ± 4.4	13.1 ± 3.8	2.9 ± 3.5
	C	9.8 ± 2.9	5.4 ± 3.9	11.9 ± 3.1	3.5 ± 3.4
	D	11.0 ± 1.8	6.8 ± 3.6	10.7 ± 3.6	5.0 ± 3.3
	E	10.9 ± 2.3	7.5 ± 3.1	10.8 ± 3.1	4.2 ± 2.6
	Mean	10.5 ± 3.0	6.6 ± 3.8	11.1 ± 3.5	3.9 ± 3.3
Two-step method	A	10.4 ± 2.2	4.5 ± 2.8	16.5 ± 2.1	9.7 ± 6.9
	B	10.7 ± 1.5	4.6 ± 2.8	17.4 ± 3.8	12.5 ± 7.7
	C	10.6 ± 2.6	3.7 ± 4.1	17.5 ± 4.2	11.8 ± 7.4
	D	8.8 ± 3.2	2.3 ± 3.0	13.7 ± 4.3	6.4 ± 6.6
	E	9.8 ± 4.1	1.9 ± 2.6	15.8 ± 4.8	7.5 ± 6.6
	Mean	10.0 ± 2.9	3.4 ± 3.2	16.2 ± 4.1	9.6 ± 7.3
Control	A	17.7 ± 1.2	17.7 ± 1.2	16.9 ± 1.6	6.0 ± 4.0
	B	16.3 ± 1.4	16.3 ± 1.4	18.5 ± 1.7	9.2 ± 7.4
	C	16.5 ± 2.0	16.1 ± 2.5	19.3 ± 1.5	12.9 ± 6.2
	D	18.6 ± 1.0	18.0 ± 2.4	16.9 ± 2.6	6.0 ± 6.3
	E	20.5 ± 3.0	19.2 ± 4.1	19.5 ± 2.9	12.7 ± 8.4
	Mean	17.9 ± 2.4	17.5 ± 2.7	18.2 ± 2.4	9.3 ± 7.2

[1)] Single-step method: HS3 corn header equipped with flail knives, operating at the lowest possible cutting height; Two-step method: HS3 corn header equipped with standard knives at a cutting height of 15–25 cm, followed by a tractor-driven flail mower; Control: HS3 corn header with standard knives at a cutting height of 15–25 cm, no additional corn stubble treatment.

Table A14: Total corn stubble height and solid stubble segment height at the Wöbs site (fourth year of field trials), mean and standard deviation (N=440)

Treatment[1)]	Block	Corn stubble height in cm			
		Non-overrun stubble		Overrun stubble	
		Total	Solid	Total	Solid
Single-step method	A	4.5 ± 2.0	2.9 ± 1.4	2.8 ± 2.4	1.3 ± 1.2
	B	6.8 ± 1.8	3.6 ± 2.9	5.7 ± 2.3	1.9 ± 1.0
	C[2)]	(8.8 ± 1.7)	(7.5 ± 1.9)	(5.1 ± 2.9)	(2.3 ± 2.3)
	D	5.2 ± 1.5	3.4 ± 1.4	5.0 ± 1.7	2.0 ± 0.8
	E	5.2 ± 2.8	3.7 ± 2.3	4.5 ± 2.8	3.2 ± 2.2
	F	7.6 ± 1.5	5.0 ± 2.3	6.6 ± 1.9	2.2 ± 1.2
	Mean	5.8 ± 2.3	3.7 ± 2.2	4.9 ± 2.6	2.1 ± 1.5
Control	A	20.5 ± 1.4	20.5 ± 1.4	20.6 ± 1.4	11.9 ± 8.1
	B	22.8 ± 2.1	22.0 ± 2.2	22.9 ± 3.8	13.5 ± 7.1
	C	22.9 ± 3.4	22.4 ± 3.3	23.1 ± 3.1	15.2 ± 8.6
	D	20.2 ± 2.3	18.5 ± 3.4	16.1 ± 7.0	10.1 ± 6.7
	E	20.1 ± 1.8	20.1 ± 1.8	20.5 ± 2.2	14.2 ± 6.7
	F	21.5 ± 1.7	21.1 ± 1.4	23.0 ± 0.9	9.3 ± 9.3
	Mean	21.3 ± 2.5	20.7 ± 2.7	21.0 ± 4.4	12.3 ± 8.0

[1)] Single-step method: HS3 corn header equipped with flail knives, operating at the lowest possible cutting height; Two-step method: HS3 corn header equipped with standard knives at a cutting height of 15–25 cm, followed by a tractor-driven flail mower; Control: HS3 corn header with standard knives at a cutting height of 15–25 cm, no additional corn stubble treatment.

[2)] Outlier not included in the calculation of the mean.

Single-step method

Two-step method

Control

Figure A1: Intended stubble pattern for each treatment