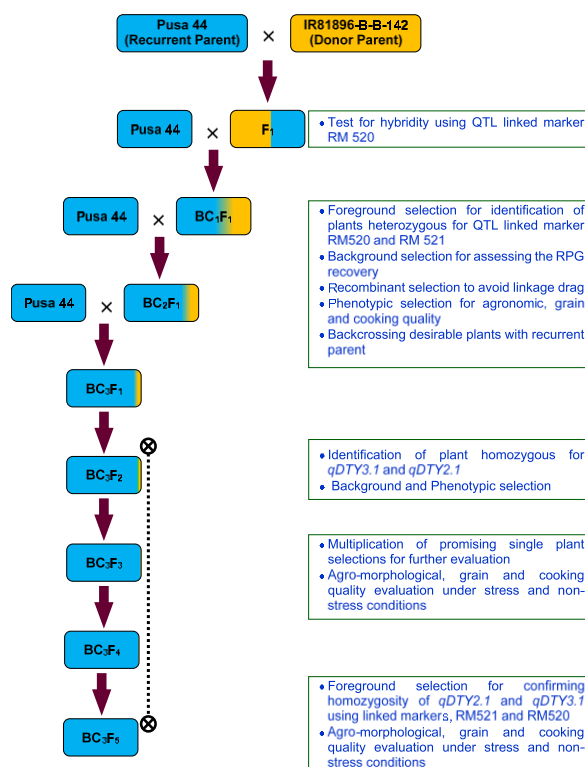
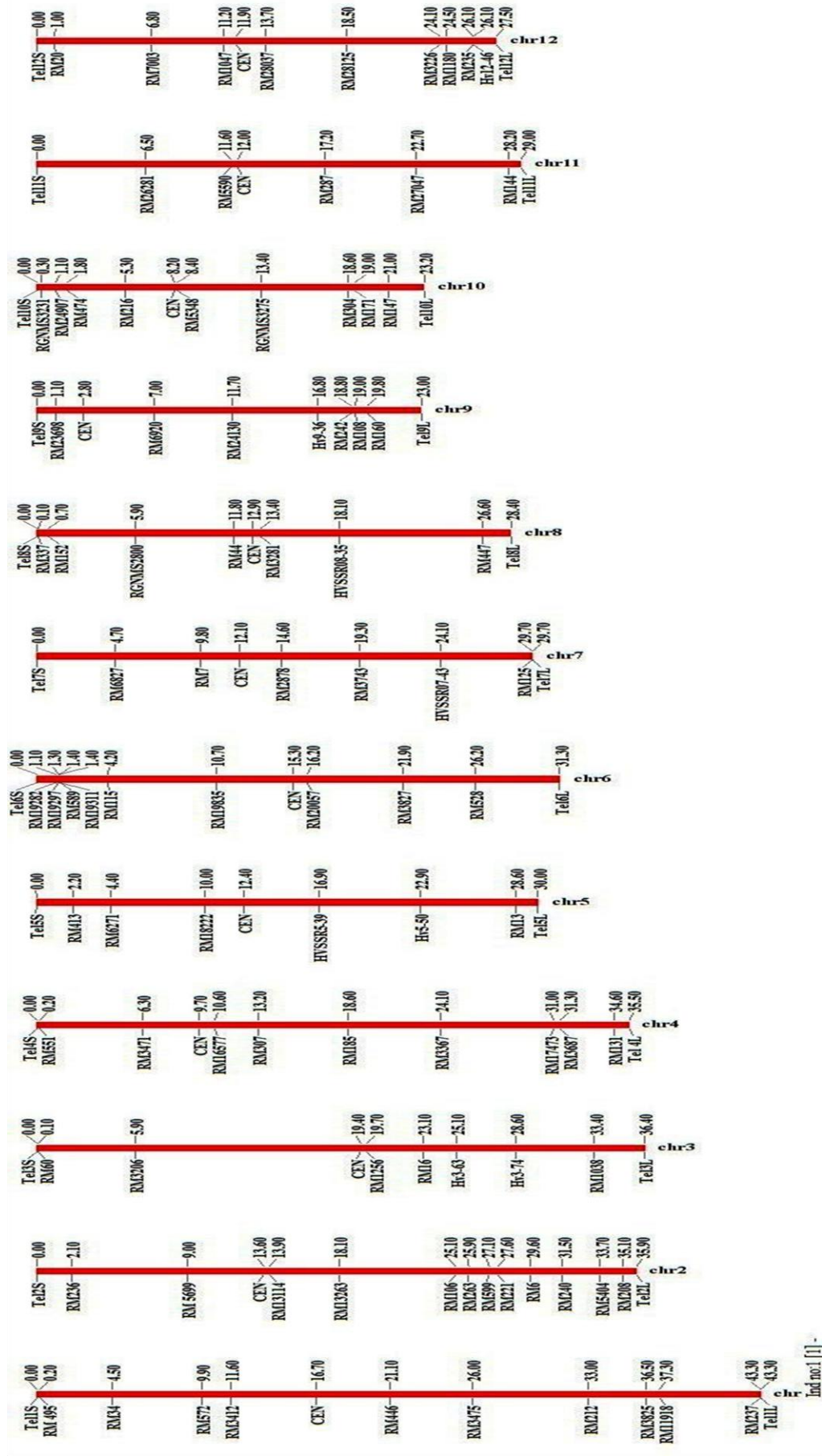


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Supplementary Figure S1. Marker assisted backcross breeding scheme adopted for introgression of *qDTY3.1* and *qDTY2.1* in Pusa 44. See citations 26, 29, 32, 33 in the main article.



Supplementary Figure S2. Graphical representation of all polymorphic markers used for background recovery

Supplementary Table 1. Yield performance of Pusa 44 qDTY NILs under drought stressed and unstressed conditions in the BC₃F₄ generation (*Kharif* 2016)

Entry	Unstressed				Stressed			
	FdG	SpF	GrY	GrW	FdG	SpF	GrY	GrW
PUSA 44	202.6	89.7	25.1	22.5	128.6	67.9	10.2	18.3
IR81896-B-B-142	168.5	88.1	19.9	20.6	123.2	73.5	13.5	16.6
IR81896-B-B-195	146.5	91.5	20.4	19.2	114.0	80.8	12.3	14.3
IR87728-59-B-B	106.7	85.2	17.3	22.3	91.5	81.5	11.7	20.8
P1823-12-1	106.5	71.7	23.7	24.1	153.4	81.7	20.6	20.8
P1823-12-10	141.9	85.1	25.8	23.9	161.2	79.6	18.7	20.2
P1823-12-12	148.9	84.2	22.8	24.4	136.6	84.1	18.3	19.4
P1823-12-14	136.3	84.6	26.4	21.6	174.2	75.1	24.3	19.8
P1823-12-19	166.1	84.9	27.9	23.3	142.8	83.8	17.5	19.4
P1823-12-30	150.7	84.6	29.0	21.8	176.8	78.6	26.4	20.2
P1823-12-33	168.7	82.3	26.1	23.9	186.6	85.4	19.9	18.1
P1823-12-35	189.1	91.0	31.0	23.9	152.6	74.5	19.9	20.1
P1823-12-38	156.9	80.4	21.1	22.3	147.2	86.8	14.8	18.8
P1823-12-42	132.7	71.3	23.3	21.4	172.8	73.2	17.5	19.6
P1823-12-45	149.9	87.3	25.8	19.2	174.4	86.4	20.0	19.6
P1823-12-50	115.9	85.0	29.7	23.2	164.6	71.6	21.5	18.3
P1823-12-53	132.1	88.8	27.7	23.4	104.4	69.6	19.0	17.4
P1823-12-55	157.5	88.6	26.0	25.8	161.8	76.9	20.8	19.9
P1823-12-62	104.4	79.3	22.7	22.3	173.1	84.9	19.2	18.2
P1823-12-63	139.2	76.9	23.7	20.8	134.1	61.9	17.2	17.4
P1823-12-64	120.0	80.7	31.9	21.9	105.3	78.6	22.1	17.6
P1823-12-66	132.2	83.0	23.4	23.7	88.9	71.8	16.4	16.2
P1823-12-68	169.8	85.5	23.6	23.5	168.7	85.1	20.4	20.6
P1823-12-69	149.8	78.9	25.5	24.7	154.9	89.7	20.7	16.8
P1823-12-72	145.0	84.6	30.8	25.4	173.9	77.7	24.6	20.0
P1823-12-76	112.0	84.2	26.6	24.4	148.3	85.1	18.4	18.2
P1823-12-77	150.6	74.2	26.5	23.1	161.9	79.2	20.3	21.3
P1823-12-80	103.2	76.5	19.1	21.7	135.3	82.1	16.4	19.2
P1823-12-81	119.4	77.7	22.6	19.5	131.3	80.2	17.9	15.1
P1823-12-82	128.2	79.3	29.3	20.4	192.7	84.4	21.5	15.7
P1823-12-83	149.2	86.4	19.4	21.5	153.9	86.5	19.0	16.4
P1823-12-122	153.2	64.5	22.4	21.1	110.6	77.1	14.9	18.5
P1823-12-133	156.5	67.5	20.2	22.5	164.1	75.5	17.9	18.4
P1823-12-137	138.3	70.3	19.7	19.2	120.5	72.2	16.2	17.1
P1823-12-140	137.3	76.4	26.4	21.1	142.1	78.0	22.0	18.2
CD (0.05)	26.7	7.6	4.2	1.9	17.8	5.2	1.7	2.0

NIL, near isogenic line; FdG, number of filled grains per panicle; SpF, spikelet fertility in %; GrY, grain yield per plant in g; GrW, weight of 1000 grains in g; CD, critical difference at 0.05%

Supplementary Table 2. Grain dimensions and quality characters of Pusa 44 qDTY NILs under BC₃F₄ generation

ENTRY	Unstressed						Stressed					
	KLBC	KWBC	LWR	KLAC	KWAC	ER	KLBC	KWBC	LWR	KLAC	KWAC	ER
PUSA 44	6.31	1.87	3.38	10.67	2.81	1.69	6.20	1.78	3.48	10.09	2.60	1.63
IR81896-B-B-142	6.92	1.96	3.54	11.18	3.00	1.61	6.71	1.83	3.66	10.58	2.79	1.58
IR81896-B-B-195	5.71	2.09	2.73	9.67	2.65	1.69	5.55	1.97	2.83	9.55	2.45	1.72
IR87728-59-B-B	4.02	1.69	2.38	6.75	2.13	1.68	3.89	1.58	2.46	6.39	2.08	1.64
P1823-12-1	5.98	1.87	3.19	9.27	2.69	1.59	5.81	1.78	3.27	8.80	2.39	1.52
P1823-12-10	5.84	2.07	2.82	9.80	3.09	1.68	5.67	1.78	3.19	9.46	2.92	1.67
P1823-12-12	5.91	1.94	3.05	9.34	3.35	1.58	5.54	1.78	3.12	9.66	3.19	1.59
P1823-12-14	5.98	2.00	2.98	10.07	3.22	1.69	5.61	1.64	3.41	8.93	2.52	1.59
P1823-12-19	6.04	2.00	3.01	9.94	2.89	1.65	5.67	1.91	2.97	9.46	2.92	1.67
P1823-12-30	6.15	2.00	3.07	9.19	3.11	1.50	5.66	1.68	3.36	9.01	2.75	1.59
P1823-12-33	6.21	2.00	3.10	10.06	2.91	1.62	5.46	1.95	2.79	9.61	3.22	1.76
P1823-12-35	6.01	2.00	3.00	9.53	3.17	1.59	5.52	1.95	2.83	8.41	2.48	1.52
P1823-12-38	6.08	2.00	3.04	9.73	3.04	1.60	5.32	1.95	2.72	9.21	2.68	1.73
P1823-12-42	5.81	2.00	2.90	8.73	2.37	1.50	5.79	1.88	3.07	9.21	3.02	1.59
P1823-12-45	5.81	1.93	3.00	9.59	2.44	1.65	5.72	1.82	3.15	9.81	2.95	1.72
P1823-12-50	6.15	2.07	2.97	9.93	3.24	1.62	5.66	1.82	3.11	8.95	2.75	1.58
P1823-12-53	5.81	2.00	2.90	9.86	2.77	1.70	5.26	1.75	3.00	9.21	2.62	1.75
P1823-12-55	6.35	2.00	3.17	9.39	2.71	1.48	6.06	1.88	3.21	9.81	2.55	1.60
P1823-12-62	5.80	2.00	2.91	9.90	3.27	1.70	5.45	1.67	3.27	9.52	2.90	1.74
P1823-12-63	5.94	1.87	3.19	9.70	3.00	1.63	5.25	1.67	3.15	8.45	2.30	1.61
P1823-12-64	6.00	1.93	3.11	9.64	2.73	1.60	5.38	1.74	3.10	9.32	2.56	1.73
P1823-12-66	6.20	2.00	3.11	9.37	3.13	1.51	5.71	1.67	3.43	9.19	2.76	1.60
P1823-12-68	5.94	1.93	3.08	10.10	2.73	1.70	5.78	1.81	3.21	9.25	2.70	1.60
P1823-12-69	5.94	2.00	2.97	9.44	3.20	1.59	5.51	1.67	3.31	9.32	2.83	1.69
P1823-12-72	5.94	1.93	3.01	9.50	3.13	1.60	5.78	1.87	3.10	9.25	2.90	1.60
P1823-12-76	5.94	2.00	2.97	9.50	3.00	1.60	5.65	1.94	2.92	9.32	2.43	1.65
P1823-12-77	6.14	2.00	3.07	9.64	3.07	1.57	5.71	1.87	3.06	9.12	2.63	1.59
P1823-12-80	5.80	2.00	2.91	9.04	2.80	1.55	5.85	1.74	3.37	9.25	2.83	1.58
P1823-12-81	5.87	2.00	2.94	9.50	3.00	1.62	5.58	1.67	3.35	9.05	2.56	1.62

ENTRY	Unstressed						Stressed					
	KLBC	KWBC	LWR	KLAC	KWAC	ER	KLBC	KWBC	LWR	KLAC	KWAC	ER
P1823-12-82	5.94	1.93	3.08	9.17	2.87	1.54	5.78	1.87	3.10	9.79	2.56	1.69
P1823-12-83	5.94	1.87	3.19	9.70	2.93	1.63	5.78	1.87	3.10	8.92	2.56	1.54
P1823-12-122	5.79	2.02	2.87	9.53	3.17	1.65	5.52	1.86	2.98	8.93	2.60	1.62
P1823-12-133	5.98	1.86	3.22	9.57	3.23	1.60	5.48	1.82	3.01	8.76	2.89	1.60
P1823-12-137	5.85	1.99	2.95	8.97	3.13	1.53	6.02	1.88	3.19	8.96	2.76	1.49
P1823-12-140	6.12	1.86	3.30	9.04	2.93	1.47	5.87	1.81	3.23	9.25	2.70	1.58
CD (0.05)	0.16	0.84	0.15	0.49	0.11	0.09	0.29	0.08	0.12	0.26	0.14	0.09

KLBC, kernel length before cooking in mm; KWBC, kernel width before cooking in mm; LWR, length/width ratio; KLAC, kernel length after cooking in mm; KWAC, kernel width after cooking in mm; ER, kernel elongation ratio on cooking; CD, critical difference at 0.05%.

Supplementary Table 3. Yield differential under stressed and unstressed conditions and drought indices of Pusa 44 *qDTY* NILs

ENTRIES	Yield reduction (g)	% Reduction	DTE (%)	RDY	SI
Pusa 44	14.93	59.4	40.60	59.40	0.59
IR81896-B-B-142	6.49	32.5	67.47	32.53	0.33
IR81896-B-B-195	8.11	39.8	60.24	39.76	0.40
IR87728-59-B-B	5.61	32.5	67.54	32.46	0.32
P1823-12-1	3.10	13.0	86.95	13.05	0.13
P1823-12-10	7.08	27.4	72.56	27.44	0.27
P1823-12-12	4.44	19.5	80.50	19.50	0.19
P1823-12-14	2.14	8.1	91.91	8.09	0.08
P1823-12-19	10.38	37.3	62.74	37.26	0.37
P1823-12-30	2.54	8.8	91.23	8.77	0.09
P1823-12-33	6.20	23.8	76.22	23.78	0.24
P1823-12-35	11.08	35.8	64.24	35.76	0.36
P1823-12-38	6.26	29.7	70.27	29.73	0.30
P1823-12-42	5.78	24.8	75.21	24.79	0.25
P1823-12-45	5.84	22.6	77.38	22.62	0.23
P1823-12-50	8.18	27.6	72.44	27.56	0.28
P1823-12-53	8.68	31.4	68.64	31.36	0.31
P1823-12-55	5.26	20.2	79.78	20.22	0.20
P1823-12-62	3.54	15.6	84.45	15.55	0.16
P1823-12-63	6.44	27.2	72.82	27.18	0.27
P1823-12-64	9.72	30.5	69.50	30.50	0.30
P1823-12-66	6.98	29.9	70.14	29.86	0.30
P1823-12-68	3.18	13.5	86.52	13.48	0.13
P1823-12-69	4.82	18.9	81.14	18.86	0.19
P1823-12-72	6.22	20.2	79.84	20.16	0.20
P1823-12-76	8.22	30.9	69.14	30.86	0.31
P1823-12-77	6.18	23.3	76.69	23.31	0.23
P1823-12-80	2.72	14.2	85.80	14.20	0.14
P1823-12-81	4.72	20.9	79.11	20.89	0.21
P1823-12-82	7.74	26.4	73.56	26.44	0.26
P1823-12-83	0.36	1.8	98.15	1.85	0.02
P1823-12-122	7.50	33.5	66.52	33.48	0.33
P1823-12-133	2.28	11.3	88.67	11.33	0.11
P1823-12-137	3.42	17.4	82.60	17.40	0.17
P1823-12-140	4.44	16.8	83.18	16.82	0.17

YPPns, yield per plant under non-stress in g; YPPs, yield per plant under stress in g; DTE, drought tolerance efficiency in per cent; RDY, relative decrease in yield in per cent; SI, susceptibility index

Supplementary Table 4. Performance of selected NILs under drought stress conditions in *Kharif* 2017 season (BC₃F₅ generation)

SN	ENTRY	DtF	PtH	PnL	NpT	BmP	PnW	SpF
1	P1823-12-1	118.5	66.4	24.2	10.1	22.9	11.3	59.5
2	P1823-12-10	118.0	64.0	24.7	10.5	24.2	11.9	63.8
3	P1823-12-12	119.5	65.6	22.8	10.8	22.9	8.7	46.5
4	P1823-12-14	118.0	65.2	23.5	10.3	23.2	10.5	72.7
5	P1823-12-19	119.0	64.2	22.4	8.9	23.8	7.9	46.0
6	P1823-12-30	119.5	65.3	21.7	8.2	23.5	6.8	49.5
7	P1823-12-33	118.5	56.7	19.5	9.5	22.8	3.3	48.8
8	P1823-12-35	119.5	63.3	22.6	8.7	22.5	9.1	56.4
9	P1823-12-38	118.5	56.0	21.9	8.4	18.2	7.1	52.1
10	P1823-12-42	118.5	61.2	22.7	7.2	17.0	7.4	49.7
11	P1823-12-45	120.5	62.2	22.9	6.7	14.4	7.1	61.7
12	P1823-12-50	118.5	59.2	20.6	9.5	23.8	9.5	61.2
13	P1823-12-52	118.5	60.0	20.7	6.3	16.0	5.4	57.9
14	P1823-12-55	118.0	60.4	20.8	7.2	21.1	6.4	50.4
15	P1823-12-62	119.5	62.6	22.0	7.2	17.8	5.5	50.8
16	P1823-12-63	118.0	60.5	22.9	7.5	20.5	6.0	51.6
17	P1823-12-64	118.5	62.7	21.1	7.0	25.2	6.6	52.2
18	P1823-12-66	117.0	62.3	21.7	7.4	22.0	6.5	56.7
19	P1823-12-68	117.5	57.9	20.3	7.0	17.9	5.8	49.0
20	P1823-12-69	119.0	59.2	20.7	5.8	19.3	4.7	44.1
21	P1823-12-72	118.0	59.9	21.3	7.2	22.9	6.3	52.8
22	P1823-12-76	118.0	62.1	22.8	7.2	25.9	7.0	56.7
23	P1823-12-77	118.5	60.8	22.4	6.8	21.5	9.8	70.0
24	P1823-12-80	117.0	65.5	22.7	5.4	21.6	5.7	43.8
25	P1823-12-81	117.0	58.9	24.2	7.2	18.9	5.0	50.1
26	P1823-12-82	117.0	64.3	22.4	7.1	23.1	12.7	79.3
27	P1823-12-83	118.5	61.1	22.7	7.3	21.5	6.6	53.9
28	P1823-12-122	119.5	58.9	22.5	6.5	20.7	11.1	69.2
29	P1823-12-133	118.5	63.9	24.0	6.2	19.2	9.0	53.7
30	P1823-12-137	119.5	59.0	22.0	7.0	21.7	6.9	63.2
31	P1823-12-140	118.5	60.1	21.3	6.3	20.2	8.9	64.3
C1	Pusa 44	119.5	64.0	20.9	7.3	20.8	7.7	48.7
C2	IR81896-B-B-142	123.5	73.4	19.4	8.6	27.9	8.9	61.2
C3	IR81896-B-B-195	121.5	81.2	20.2	10.6	40.2	10.7	59.5
C4	IR64	108.0	55.9	20.7	8.0	15.9	8.1	43.0
	LSD	1.2	5.1	2.6	1.2	9.9	3.1	12.8

DtF, days to 50% flowering; PtH, plant height in cm; NpT, number of panicle bearing tillers; PnL, length of panicle in cm; BmP, biomass per plant in g; PnW, panicle weight in g; SpF, spikelet fertility in %

Supplementary Table 5. Quality data of Pusa 44 qDTY NILs under drought stress during *Kharif* 2017

ENTRY	GrW	KLBC	KWBC	LWR	KLAC	KWAC	ER
P1823-12-1	20.5	5.7	1.7	3.4	9.1	2.5	1.6
P1823-12-10	19.5	5.6	1.7	3.4	9.1	2.3	1.6
P1823-12-12	19.5	5.5	1.7	3.3	8.8	2.5	1.6
P1823-12-14	19.7	5.6	1.7	3.4	8.9	2.5	1.6
P1823-12-19	18.9	5.3	1.7	3.2	8.3	2.3	1.6
P1823-12-30	19.3	5.7	1.7	3.4	9.1	2.2	1.6
P1823-12-33	19.0	5.5	1.7	3.3	9.1	2.5	1.7
P1823-12-35	19.2	5.5	1.7	3.3	8.6	2.5	1.6
P1823-12-38	18.1	5.4	1.7	3.2	8.9	2.5	1.7
P1823-12-42	19.6	5.3	1.7	3.2	8.9	2.5	1.7
P1823-12-45	18.9	5.3	1.7	3.2	8.5	2.5	1.6
P1823-12-50	19.5	5.7	1.7	3.4	8.3	2.5	1.5
P1823-12-52	18.6	5.7	1.7	3.4	8.4	2.3	1.5
P1823-12-55	20.0	5.5	1.7	3.3	8.5	2.4	1.6
P1823-12-62	18.2	5.3	1.7	3.2	8.9	2.5	1.7
P1823-12-63	19.8	5.5	1.7	3.3	8.9	2.3	1.6
P1823-12-64	18.9	5.6	1.7	3.4	9.1	2.3	1.6
P1823-12-66	17.1	5.6	1.7	3.4	9.1	2.3	1.6
P1823-12-68	18.1	5.5	1.7	3.3	8.9	2.3	1.6
P1823-12-69	18.1	5.2	1.7	3.1	8.7	2.3	1.7
P1823-12-72	19.3	5.4	1.7	3.2	8.7	2.5	1.6
P1823-12-76	18.3	5.6	1.7	3.4	9.3	2.6	1.7
P1823-12-77	20.4	5.5	1.7	3.3	9.3	2.5	1.7
P1823-12-80	19.0	5.6	1.7	3.4	9.0	2.5	1.6
P1823-12-81	18.5	5.2	1.7	3.1	8.6	2.5	1.7
P1823-12-82	17.9	5.5	1.7	3.3	8.3	2.3	1.5
P1823-12-83	18.8	5.3	1.7	3.2	8.8	2.3	1.7
P1823-12-122	18.9	5.5	1.7	3.3	8.7	2.5	1.6
P1823-12-133	17.8	5.7	1.7	3.4	9.1	2.3	1.6
P1823-12-137	17.3	5.6	1.7	3.4	8.4	2.5	1.5
P1823-12-140	17.9	5.3	1.7	3.2	9.3	3.1	1.8
PUSA44	18.3	5.7	1.7	3.4	9.1	2.5	1.6
IR81896-B-B-142	16.5	4.8	1.7	2.9	8.3	2.3	1.7
IR81896-B-B-195	14.2	5.1	1.7	3.0	8.3	2.3	1.6
IR64	18.3	5.9	1.7	3.6	9.3	2.7	1.6
LSD	1.7	0.0	0.0	0.0	1.0	0.0	0.2

GrW, weight of 1000 grains in g; KLBC, kernel length before cooking in mm; KWBC, kernel width before cooking in mm; LWR, length/width ratio; KLAC, kernel length after cooking in mm; KWAC, kernel width after cooking in mm; ER, kernel elongation ratio on cooking; CD, critical difference at 0.05%.

Supplementary Table 6. Performance of Pusa 44 qDTY NILs under unstressed conditions in *Kharif* 2017

ENTRY	DtF	PtH	PnL	NpT	BmP	GrY	YdH	FdG	GrN	SpF
P1823-12- 1	113.5	91.1	9.9	25.5	31.6	16.8	6176.0	152.1	213.6	71.2
P1823-12-10	113.0	87.5	9.2	25.5	38.4	18.8	6330.7	181.1	216.4	83.7
P1823-12-12	115.5	89.7	8.8	25.4	34.5	19.2	6236.0	169.6	204.6	82.9
P1823-12-14	114.0	83.7	9.1	25.6	30.6	18.4	6539.1	163.8	195.8	83.6
P1823-12-19	115.5	85.1	8.8	25.6	30.5	17.4	5851.0	159.6	190.8	83.6
P1823-12-30	114.5	85.4	9.5	24.9	31.7	18.6	6064.9	145.2	175.1	82.9
P1823-12-33	114.0	83.9	11.7	25.2	44.3	23.5	6543.1	145.8	174.0	83.8
P1823-12-35	113.5	85.9	9.8	24.2	32.7	17.7	6090.3	147.0	183.5	80.3
P1823-12-38	114.0	82.5	10.0	23.9	35.4	16.9	5324.6	175.9	218.2	80.6
P1823-12-42	114.5	83.8	9.5	24.0	32.0	15.1	5442.0	156.2	212.7	73.4
P1823-12-45	116.5	81.3	10.3	23.8	35.1	19.2	5850.6	163.1	207.4	78.6
P1823-12-50	114.5	87.5	10.3	25.0	46.7	19.3	6335.8	158.5	189.6	83.6
P1823-12-52	116.0	83.5	10.7	24.0	34.2	20.9	5959.7	155.5	192.2	80.8
P1823-12-55	114.0	86.6	9.9	25.2	36.5	18.1	6153.6	188.2	213.5	88.1
P1823-12-62	115.0	84.9	10.2	24.7	37.4	15.4	5279.0	155.8	195.4	79.7
P1823-12-63	111.5	85.2	9.3	24.9	32.8	20.7	5980.0	145.2	174.6	83.2
P1823-12-64	116.0	83.6	10.0	24.2	35.0	20.5	5594.4	163.8	199.8	81.9
P1823-12-66	111.0	86.3	9.9	24.8	34.6	20.3	5971.1	148.3	177.8	83.4
P1823-12-68	113.5	81.3	10.7	23.7	37.4	22.3	6272.4	160.7	187.9	85.5
P1823-12-69	115.5	83.6	8.1	24.6	34.2	16.8	6202.1	161.0	202.4	79.5
P1823-12-72	113.5	88.9	9.9	24.6	38.4	20.6	6059.0	162.9	193.4	84.2
P1823-12-76	113.5	87.2	9.1	25.7	37.3	20.1	6222.7	164.6	197.7	83.2
P1823-12-77	114.5	82.8	10.4	24.8	36.6	18.2	5493.0	147.4	195.7	75.4
P1823-12-80	111.5	85.1	8.8	24.3	28.5	17.2	5917.7	138.4	182.1	76.0
P1823-12-81	111.0	86.4	11.6	25.1	42.2	20.0	5605.5	150.3	194.6	77.3
P1823-12-82	111.5	88.5	9.0	24.8	33.4	19.4	5454.8	191.5	240.9	79.5
P1823-12-83	114.5	84.0	9.0	25.5	32.3	16.8	5208.3	160.3	215.1	74.6
P1823-12-122	115.5	87.3	9.7	24.8	36.6	15.2	4235.5	192.4	289.8	66.7
P1823-12-133	114.5	83.7	9.1	26.5	26.2	15.2	5573.4	169.4	243.9	69.6
P1823-12-137	115.5	83.6	8.7	24.6	30.5	16.1	5028.4	173.3	246.7	70.3
P1823-12-140	114.0	83.6	10.1	25.6	40.3	19.1	5943.3	163.8	224.0	73.1
PUSA44	113.5	86.8	9.9	25.8	37.3	21.4	6186.1	198.2	235.8	84.0
IR81896-B-B-142	120.0	127.9	9.9	26.5	34.9	14.4	4581.2	169.8	214.1	79.3
IR81896-B-B-195	119.0	124.8	10.5	26.0	34.9	14.0	5427.4	186.6	228.7	81.6
IR64	100.0	82.3	10.3	23.9	37.7	15.7	4014.2	144.3	183.1	78.8
LSD	1.1	5.2	1.7	1.3	11.5	4.6	1003.3	31.3	41.5	3.5

DtF, days to 50% flowering; PtH, plant height in cm; NpT, number of panicle bearing tillers; PnL, length of panicle in cm; BmP, biomass per plant in g; GrY, grain yield per plant in g; YdH, yield per ha in kg; FdG, number of filled grains per panicle; PnW, panicle weight in g; GrN, total number of grains per panicle; SpF, spikelet fertility in %

Supplementary Table 7. Quality parameters of selected NILs under unstressed conditions in *Kharif* 2017

ENTRY	HgP	MgP	HRR	GrW	KLBC	KWBC	LWR	KLAC	KWAC	ER
P1823-12-1	78.1	71.4	65.7	23.4	6.1	1.9	3.1	9.3	2.8	1.5
P1823-12-10	78.7	73.2	69.2	23.7	6.2	2.0	3.1	9.5	2.9	1.5
P1823-12-12	78.0	72.0	68.5	24.6	6.0	2.0	3.0	9.4	2.9	1.6
P1823-12-14	79.3	70.4	67.8	22.5	6.2	2.0	3.0	9.6	2.6	1.6
P1823-12-19	78.6	74.6	69.4	23.8	6.1	2.0	3.1	9.4	2.8	1.5
P1823-12-30	77.5	71.2	67.2	22.4	5.9	2.0	2.9	9.6	2.6	1.6
P1823-12-33	78.7	72.6	68.5	22.8	6.0	2.0	3.0	9.2	3.0	1.5
P1823-12-35	79.3	74.0	69.5	23.2	5.9	2.0	3.0	9.3	2.8	1.6
P1823-12-38	78.8	74.3	67.9	21.3	6.0	2.0	2.9	9.3	2.8	1.6
P1823-12-42	79.1	72.5	67.8	21.4	5.9	2.0	2.9	9.3	2.8	1.6
P1823-12-45	78.5	72.9	68.3	19.8	5.9	1.9	3.1	9.3	2.7	1.6
P1823-12-50	79.2	71.7	67.5	21.9	5.9	1.9	3.1	9.3	2.8	1.6
P1823-12-52	78.1	70.6	66.4	23.4	5.9	2.0	3.0	9.9	3.1	1.7
P1823-12-55	79.3	72.2	68.3	22.8	6.1	1.9	3.2	9.9	2.8	1.6
P1823-12-62	78.1	71.6	66.9	23.1	6.1	2.0	3.0	9.2	2.8	1.5
P1823-12-63	78.6	72.5	68.0	22.4	5.8	2.0	3.0	9.3	2.7	1.6
P1823-12-64	78.2	73.9	70.0	22.1	6.0	2.0	3.0	9.4	2.7	1.6
P1823-12-66	78.6	73.6	68.4	22.5	6.2	2.0	3.1	9.4	2.8	1.5
P1823-12-68	77.9	71.9	68.2	22.9	6.1	2.0	3.1	9.7	2.8	1.6
P1823-12-69	77.9	71.9	68.5	22.8	6.0	2.0	3.0	9.4	3.0	1.6
P1823-12-72	78.4	70.7	65.5	22.6	6.1	2.0	3.0	9.4	3.1	1.6
P1823-12-76	78.3	71.5	67.4	24.0	6.0	2.0	3.0	9.7	2.9	1.6
P1823-12-77	78.0	72.9	67.7	22.1	5.7	2.0	2.8	9.5	2.9	1.7
P1823-12-80	78.7	72.0	68.0	22.5	5.8	2.0	2.9	9.7	2.9	1.7
P1823-12-81	79.1	72.5	68.2	21.5	5.8	2.0	3.0	9.5	2.8	1.6
P1823-12-82	77.8	70.9	66.8	23.1	6.1	2.0	3.1	9.5	3.3	1.6
P1823-12-83	78.6	71.3	66.6	21.3	6.4	1.9	3.3	9.1	3.1	1.4
P1823-12-122	79.1	72.2	67.6	21.8	6.6	1.9	3.5	9.1	3.3	1.4
P1823-12-133	78.4	71.5	67.6	21.5	6.3	2.1	3.0	9.3	2.7	1.5
P1823-12-137	79.2	72.7	68.4	19.9	5.8	2.0	2.9	9.4	2.7	1.6
P1823-12-140	79.0	71.6	68.2	20.9	5.9	2.0	3.0	9.3	2.7	1.6
PUSA44	78.4	72.3	66.6	22.6	6.1	1.9	3.2	9.2	2.8	1.5
IR81896-B-B-142	79.4	72.4	71.1	20.6	5.7	1.9	3.0	9.1	2.5	1.6
IR81896-B-B-195	79.5	73.6	70.3	19.2	5.6	2.1	2.7	9.6	2.8	1.5
IR64	78.1	73.9	58.3	23.0	6.1	1.9	3.3	9.5	2.6	1.6
LSD	1.5	1.8	2.2	2.7	0.4	0.1	0.3	0.3	0.6	0.1

HgP, hulling percentage; MgP, milling percentage; HRR, head rice recovery; GrW, weight of 1000 grains; KLBC, kernel length before cooking in mm; KWBC, kernel width before cooking in mm; LWR, length/width ratio; KLAC, kernel length after cooking in mm; KWAC, kernel width after cooking in mm; ER, kernel elongation ratio on cooking; CD, critical difference at 0.05%.