

Table S5. Assay of oil content in seeds of the transgenic *Brassica napus* (T3 generation).**In the pods placed in trial field under natural conditions**

Genotype	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
WT	36.26	35.76	36.00	34.38	36.27	36.22	34.59	34.70	35.03	34.87
CK	35.88	37.02	36.50	35.58	37.49	35.62	34.21	35.20	34.48	34.66
OSW6	48.65	48.60	48.39	47.38	45.61	47.51	48.39	44.60	46.98	46.19
OSW9	48.09	42.66	51.48	45.27	48.53	48.53	45.43	47.09	47.88	48.40
OSW13	42.94	49.41	48.41	49.07	48.37	44.58	44.66	46.83	46.05	43.62
OSA5	40.99	38.06	41.89	39.40	40.36	41.72	41.00	38.50	39.89	38.62
OSA11	37.84	40.05	37.16	38.63	40.55	40.45	37.89	38.18	37.87	38.64
OSA18	36.78	40.05	38.06	38.07	39.90	40.20	37.47	39.29	37.35	38.38
OSD4	47.98	49.11	47.33	47.88	46.54	47.57	47.67	48.54	44.86	44.79
OSD9	50.72	48.75	48.48	48.42	50.50	49.74	49.47	47.97	51.98	50.18
OSD12	46.66	48.19	48.90	44.35	47.00	48.07	47.43	46.24	48.77	43.65
OLW3	48.32	47.41	47.60	47.74	48.05	47.44	47.12	47.15	45.55	46.74
OLW9	42.08	46.15	46.08	46.11	45.82	51.41	26.62	45.20	46.71	46.39
OLW14	35.50	35.16	34.82	35.88	35.77	34.26	35.62	34.73	35.89	36.86
OLA4	36.28	36.19	35.54	36.07	38.02	36.91	37.24	35.20	36.05	36.43
OLA13	36.07	34.64	33.81	34.79	37.28	35.27	32.73	35.32	36.71	34.02
OLA17	47.01	48.26	48.58	47.02	46.67	47.10	49.25	46.97	46.55	49.88
OLD2	47.63	46.21	46.20	50.71	49.28	46.30	48.40	47.47	45.83	49.19
OLD9	49.20	48.53	46.88	46.58	44.64	48.75	46.96	48.27	49.25	46.71
OLD15	46.66	48.19	48.90	44.35	47.00	48.07	47.43	46.24	48.77	43.65

In agricultural land of the trial field under natural conditions

Genotype	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
WT	35.75	35.63	35.61	35.34	35.95	35.66	35.41	34.71	35.39	34.84
CK	36.26	36.33	36.02	35.61	36.20	35.64	35.12	35.21	35.49	35.45
OSW6	46.58	47.44	47.03	47.46	46.41	48.70	49.53	46.47	47.36	46.64
OSW9	47.62	47.00	49.05	46.39	47.37	48.25	46.77	45.57	49.08	49.40
OSW13	44.17	48.68	46.42	47.61	47.01	46.33	44.87	47.72	45.80	47.17
OSA5	40.31	39.77	41.45	38.87	39.73	39.83	40.20	38.75	40.45	39.69
OSA11	38.63	40.06	37.50	38.51	38.82	39.63	38.64	38.61	38.24	38.11
OSA18	38.73	40.13	37.85	38.61	38.11	38.93	37.85	39.66	38.53	38.03
OSD4	46.94	47.61	48.13	46.69	45.83	46.87	47.04	48.42	46.73	47.43
OSD9	49.70	49.14	49.07	49.69	50.25	49.80	49.72	49.70	50.46	49.82
OSD12	44.94	45.75	46.51	46.49	48.69	45.36	48.27	46.26	45.82	46.41
OLW3	46.88	46.55	48.64	47.01	48.55	46.52	48.72	44.83	47.86	45.84
OLW9	47.58	48.16	46.88	45.18	48.33	45.84	48.05	47.30	47.03	46.77
OLW14	44.00	48.14	46.33	46.05	45.08	48.19	38.68	45.98	39.80	46.58
OLA4	35.41	35.14	35.31	35.42	36.18	35.34	36.15	35.89	35.86	35.69
OLA13	36.64	36.17	35.94	35.72	36.19	36.03	35.95	35.96	37.20	36.41
OLA17	35.66	35.85	35.07	34.75	36.16	36.25	34.65	34.77	35.66	34.81
OLD2	47.38	47.75	47.82	48.60	46.67	48.49	47.56	48.04	47.63	48.43
OLD9	47.41	46.89	46.10	48.94	48.05	48.21	47.78	49.21	47.97	47.98
OLD15	48.22	47.88	48.24	47.13	45.99	47.77	46.79	47.27	47.08	47.19

WT, wild type; CK, the null transgenic lines; OSW6/9/13, *BnSnRK2;2* transgenic lines; OSA5/11/18, *BnSnRK2;2TI77A* transgenic lines; OSD4/9/12, *BnSnRK2;2TI77D* transgenic lines; OLW3/9/14, *BnLEC1* transgenic lines; OLA4/13/17, *BnLEC1S17A* transgenic lines; OLD2/9/15, *BnLEC1S17D* transgenic lines.