

Input factors of the sensitivity analysis, description, selected values for the fractional factorial design and units.

Input factor	Description	Values			Unit
Density	Sowing density	100	200	400	plant/m <sup>2</sup>
GAI <sub>c</sub>	Green Area Index threshold above which the emission of tillers stops	0.25	0.75	1.25	-
d <sub>GAIp</sub>	Maximal range for plant detection	0.2	0.5	1	m
PAR <sub>t</sub>	PAR threshold below which a tiller does not survive	2x10 <sup>5</sup>	3x10 <sup>5</sup>	4x10 <sup>5</sup>	μmol.cm <sup>-2</sup> .°Cd <sup>-1</sup>
Δ <sub>prot</sub>	Thermal time interval during which two tillers of the same plant cannot die	10	50	100	°Cd
<i>t</i> <sub>beg</sub> <sup>reg</sup>	Physiological stage at which tiller regression can start	3.2	4.2	5.2	-
<i>N</i> <sub>MS</sub> <sup>B</sup>	Final number of leaves on the main stem	8.3	11.3	15.3	-
<i>L</i> <sub>max</sub> <sup>B</sup>	Final length of the longest blade of the main stem	8	16.6	35	cm
Leaf type	Leaf inclination: combination of a parameter for blade insertion angle and a parameter for blade curvature	planophile	medium	erectophile	-
P <sub>T</sub>	Probability of tiller emergence (except coleoptile tiller)	0.5	0.75	0.95	-
P <sub>CT</sub>	Probability of emergence of the coleoptile tiller	0	0.35	0.7	-
Height	Final height of the main stem	40	100	160	cm
Phl	Phylochron: thermal time interval between the emergence of two successive leaves	80	100	125	°Cd