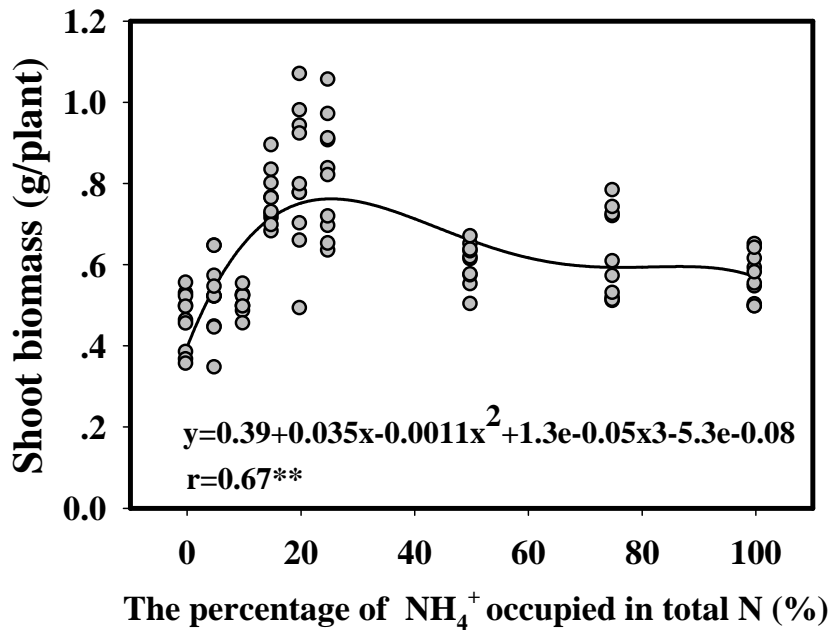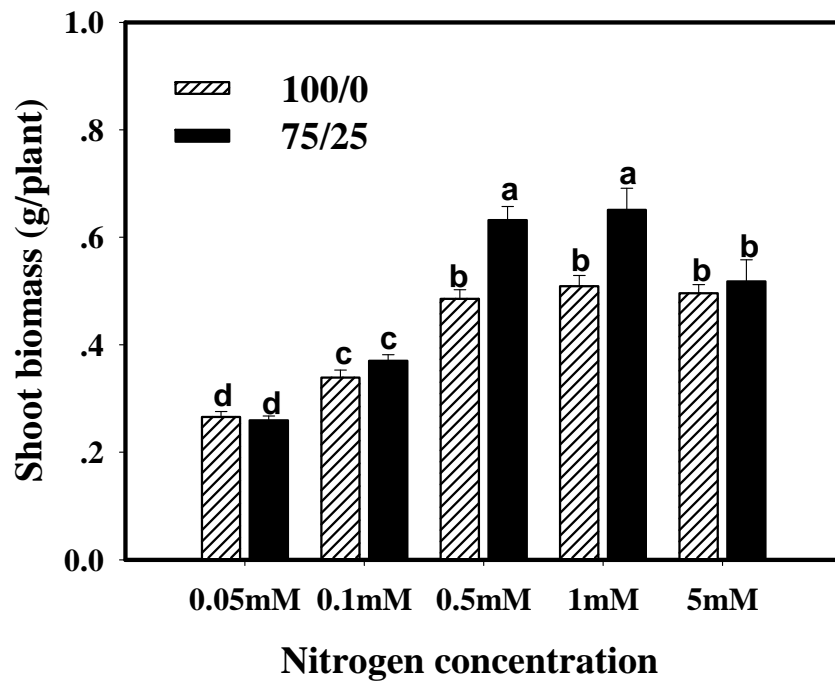Appendix A: The growth device used in the experiment.

Appendix B: Shoot biomass per plant as affected by N forms and plant density. Plants were supplied with 1mM nitrogen with NO_3^-/NH_4^+ ratio of 100/0, 95/5, 90/10, 85/15, 80/20, 75/25, 50/50, 25/75 and 0/100 for 15 days.

Appendix C: Shoot biomass of plant grown under high plant density in the 100/0 (nitrate only) and 75/25 (75/25 NO_3^-/NH_4^+) at total N concentration of 0.05, 0.1, 0.5, 1 and 5mM. Values are mean±SE (n=10), significantly differences at $P<0.05$ are shown with different letters.
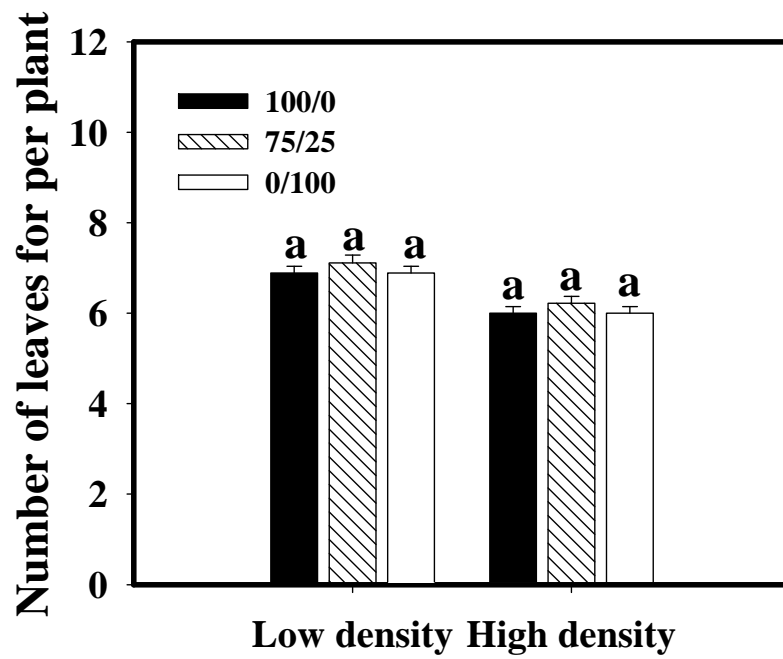
Appendix D The number of leaves per plant of maize grown under low and high density and different N forms for 15 days. Values are mean±SE (n=10), significantly differences at $P<0.05$ are shown with different letters.

Appendix E: Shoot N, P, K, Ca, Cu, Fe, Mg, Mn and Zn concentration as affected by N forms under low and high plant density.

	Treatments	Nutrient concentration								
		N (mg g⁻¹)	P (mg g⁻¹)	K (mg g⁻¹)	Ca (µg g⁻¹)	Cu (µg g⁻¹)	Fe (µg g⁻¹)	Mg (µg g⁻¹)	Mn (µg g⁻¹)	Zn (µg g⁻¹)
LD	100/0	30.80 a	11.61 a	87.73 a	1.99 a	9.19 b	0.13 a	4.19 a	40.42 a	31.00 a
	75/25	28.58 a	9.59 b	76.13 b	1.60 c	9.19 b	0.12 a	3.18 b	22.25 b	20.83 b
	0/100	29.68 a	10.06 b	73.19 b	1.89 b	10.77 a	0.12 a	2.83 c	9.17 c	16.75 b
HD	100/0	34.04 a	13.58 a	93.65 a	2.50 a	9.77 b	0.11 a	5.12 a	53.46 a	22.83 a
	75/25	32.85 a	14.15 a	92.15 a	2.11 b	10.06 ab	0.11 a	4.22 b	44.67 b	19.25 a
	0/100	32.62 a	13.14 a	86.23 b	2.69 a	11.35 a	0.12 a	3.82 b	30.21 c	19.17 a
	Density	***	***	***	***	***	*	NS	*	**
	N forms	NS	**	*	*	**	NS	***	***	**
	Density×N forms	NS	NS	*	**	*	NS	*	**	*

100/0, 75/25 and 0/100 represent nitrate only, 75/25 NO_3^-/NH_4^+ and ammonium only, respectively. Values are means (n=6). At the same pant density, significantly differences at $P < 0.05$ are shown with different letters. *, **, and *** indicate significant difference at 0.05, 0.01 and 0.001 level, respectively; NS, no significant difference.