

Supplementary Material

Genetic variation in growth, ionic accumulation and salt tolerance indices under long-term salt stress in halophytic Tunisian sea barley (*Hordeum marinum* ssp. *marinum*)

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Fig. S1. Sites from which were sampled natural populations of *Hordeum marinum ssp. marinum*. Bouficha (BF), Bkalta (BK), Lac de Bizerte (LB), Lessouda (LS), Medjez El Bab (MB), Mouthul (MT), Sebkhet Ferjouna (SF), Soliman (SL), Sidi Othman (SO), Tabarka (TB).

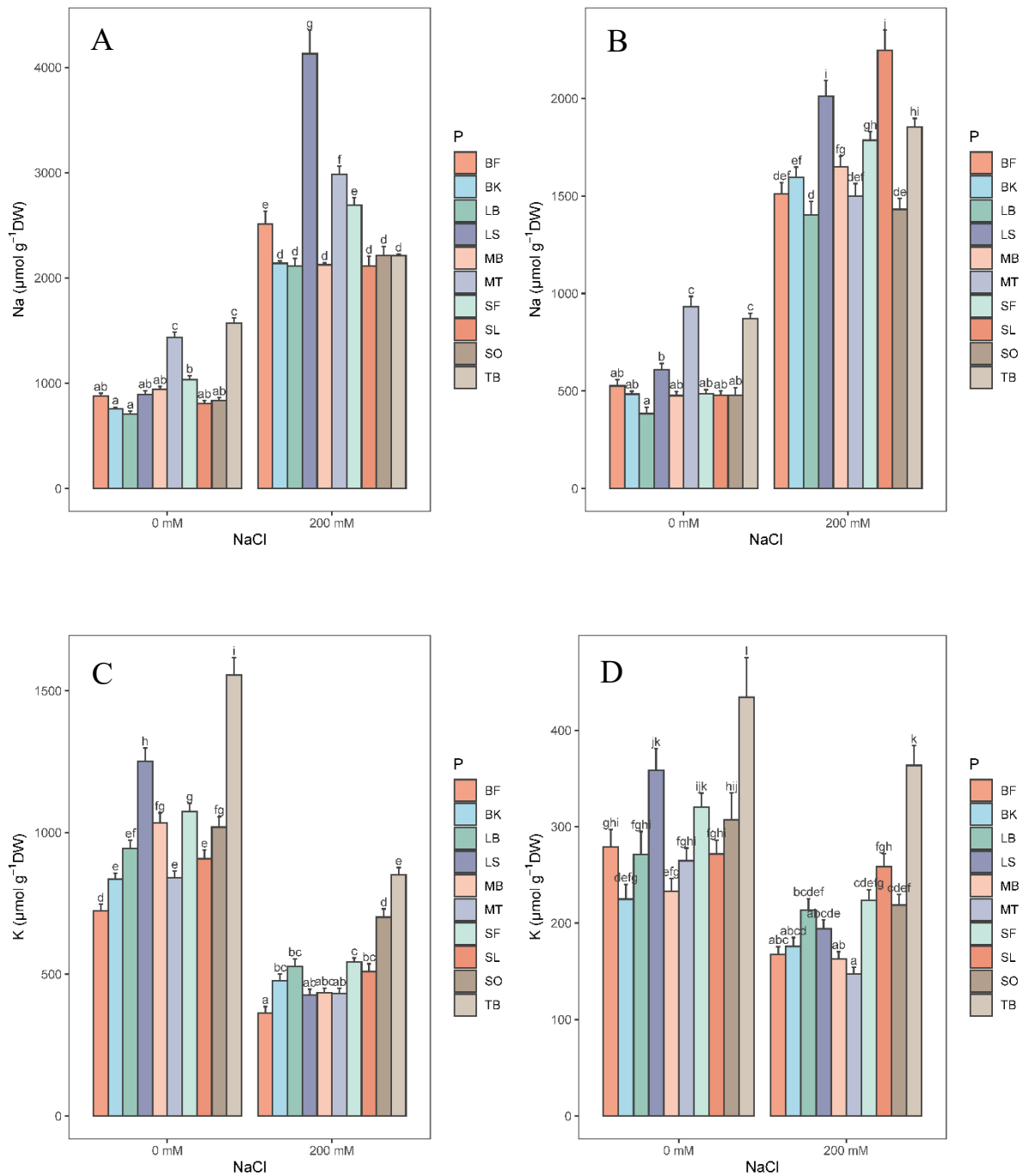


Fig. S2. Effect of salt treatment on sodium and potassium contents in leaves (A, C) and roots (B, D) of *H. marinum ssp marinum* populations. Means with a common letter are not significantly different at $\alpha = 0.05$ according to Tukey's HSD-test. Bouficha (BF), Bkalta (BK), Lac de Bizerte (LB), Lessouda (LS), Medjez El Bab (MB), Mouthul (MT), Sebket Ferjouna (SF), Soliman (SL), Sidi Othman (SO), Tabarka (TB).

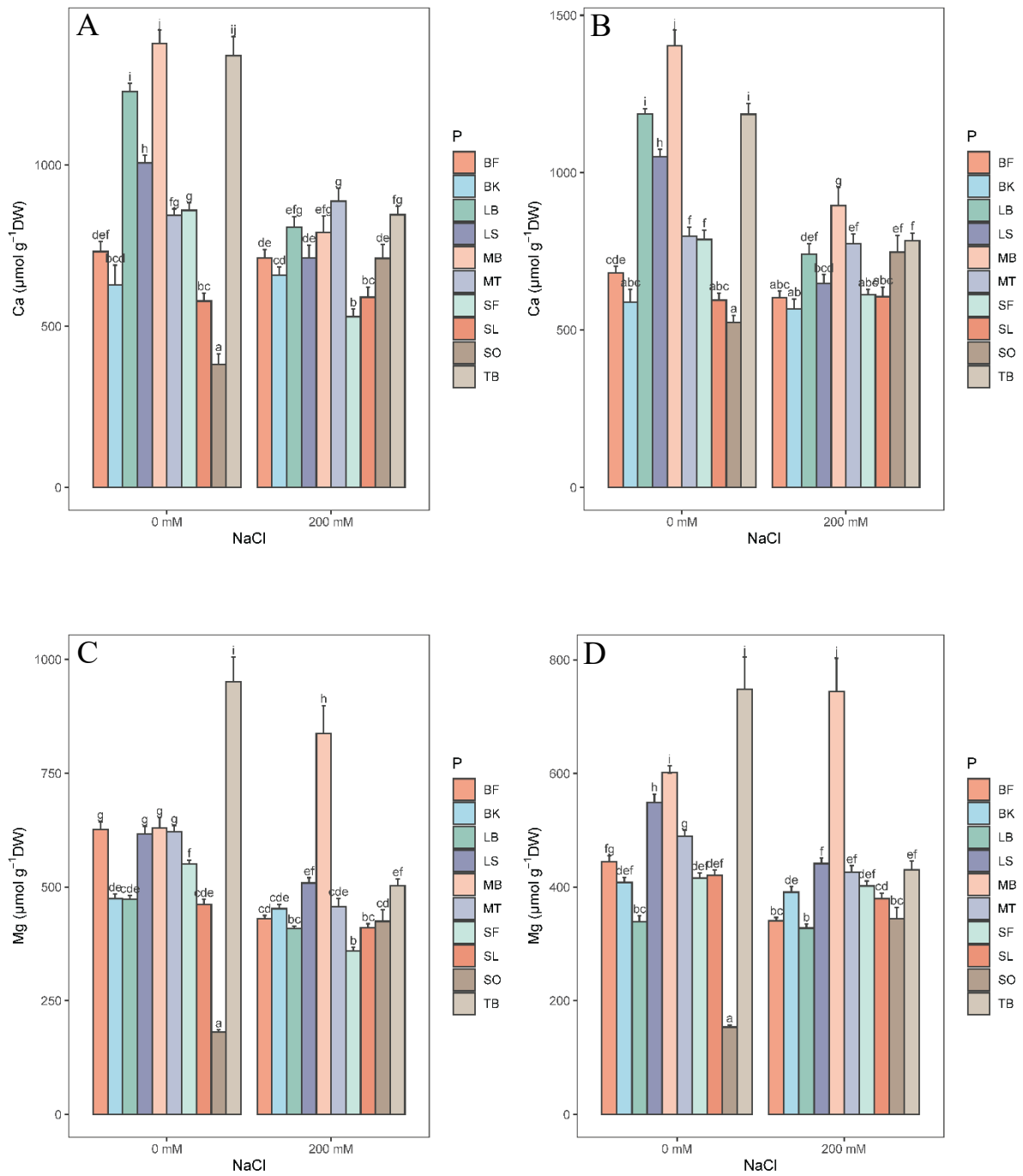


Fig. S3. Effect of salt treatment on calcium and magnesium contents in leaves (A, C) and roots (B, D) of *H. maritima ssp. maritima* populations. Means with a common letter are not significantly different at $\alpha = 0.05$ according to Tukey's HSD-test. Bouficha (BF), Bkalta (BK), Lac de Bizerte (LB), Lessouda (LS), Medjez El Bab (MB), Mouthul (MT), Sebkheth Ferjouna (SF), Soliman (SL), Sidi Othman (SO), Tabarka (TB).

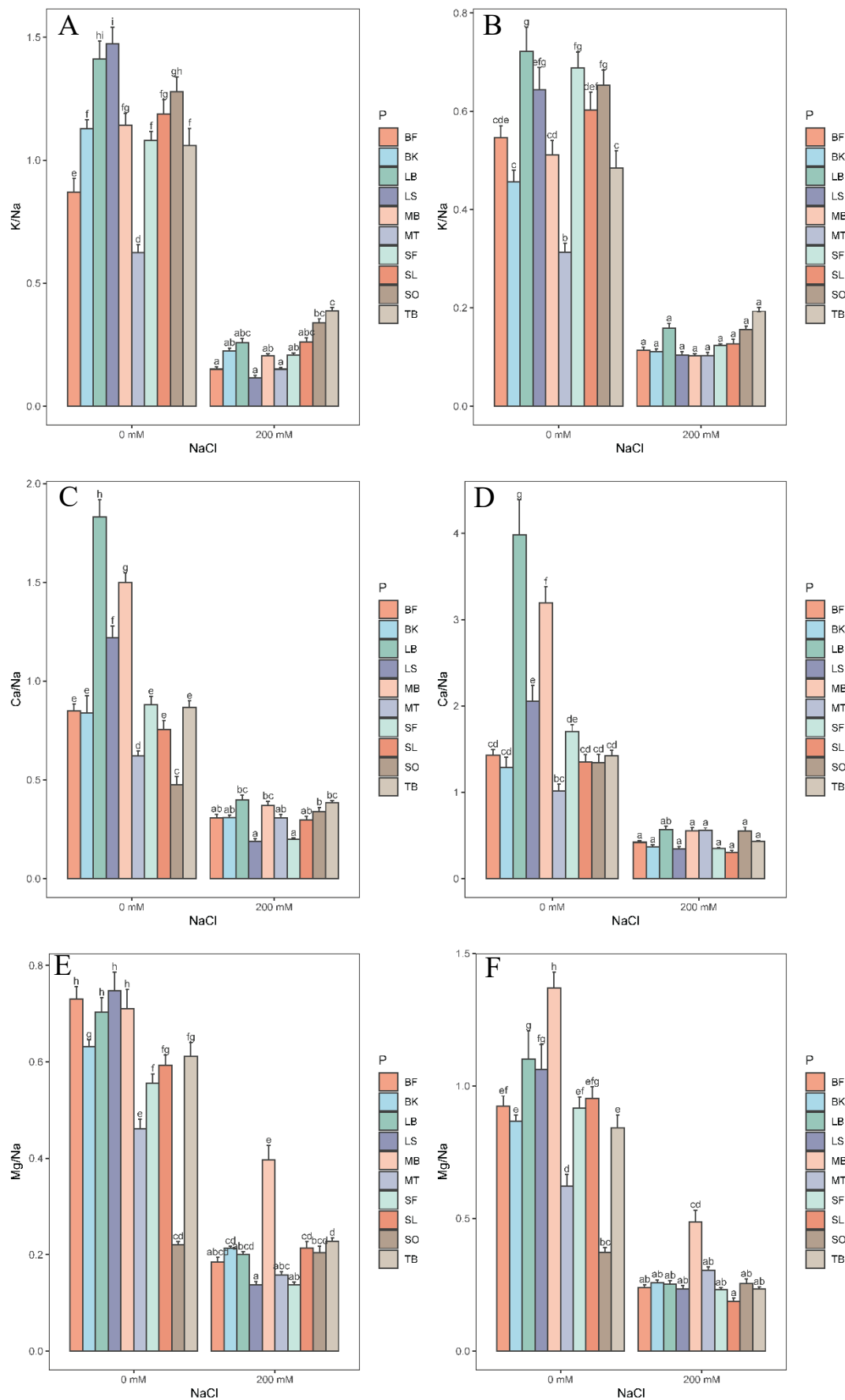


Fig. S4. Effect of salt treatment on K/Na, Ca/Na and Mg/Na ratios in leaves (A, C, E) and roots (B, D, F) of *H. marinum ssp. marinum* populations. Means with a common letter are not significantly different at $\alpha = 0.05$ according to Tukey's HSD-test. Bouficha (BF), Bkalta (BK), Lac de Bizerte (LB), Lessouda (LS), Medjez El Bab (MB), Mouthul (MT), Sebkheth Ferjouna (SF), Soliman (SL), Sidi Othman (SO), Tabarka (TB).

Table S1. Ecological parameters of the collection sites of the 10 populations of *Hordeum marinum ssp marinum*.

| Geographic zone | Population code | Site | Latitude (N) | Longitude (E) | Altitude (m) | Bioclimatic zone and winter variant |
|-----------------|-----------------|------------------|--------------|---------------|--------------|--|
| North | LB | Lac de Bizerte | 37°11'5.44" | 9°46'36.20" | 0 | Sub-humid cool winter |
| | SO | Sidi Othmen | 36°55'31.44" | 9°56'42.20" | 9 | Upper semi-arid cool winter |
| North-West | MB | Mdjez El Beb | 36°38'.3594" | 9°36'33.34" | 50 | Upper semi-arid cool winter |
| | TB | Tabarka | 36°54'20.83" | 8°44'47.14" | 12 | Humid cool winter |
| | MT | Muthul | 36°24'26.07" | 8°44'47.92" | 200 | Upper semi-arid temperate/cool winter |
| Cap Bon | SF | Sebkhet Ferjouna | 36°48'49.94" | 10°57'53.84" | 37 | Sub-humid cool winter |
| | SL | Soliman | 36°43'8.58" | 10°28'52.72" | 0 | Upper semi-arid hot winter |
| Sahel | BF | Bouficha | 36°16'1.44" | 10°28'27.54" | 0 | Lower semi-arid cool winter |
| | BK | Bkalta | 35°36'51.88" | 10°58'50.54" | 0 | Lower semi-arid Hot winter |
| Centre | LS | Lessouda | 35° 6'21.89" | 9°29'26.96" | 318 | Arid temperate winter |