

SEASONAL DYNAMICS OF MINERAL NUTRIENTS BY JOJOBA (*SIMMONDSIA CHINENSIS* L.) LEAVES

J.B. PANDYA¹, R.H.GOHIL², B.D. SETHIA¹, M.R. RATHOD¹ AND D.R. PARMAR¹

¹*Phytosalinity Discipline, Central Salt and Marine Chemical Research Institute (CSIR),
G.B.Marg, Bhavnagar-364002 (Gujarat), India*

²*Hash Biotech Lab Pvt Ltd., Hash Group, SCO-311 & 312, Sector - 40 - D,
Chandigarh - 160036, India*

²*Corresponding author : raj_gohil_2004@yahoo.co.in*

ABSTRACT : The dry weight accumulation per leaf and the accumulation of nitrogen (N), phosphorus (P), potassium (K), calcium (Ca), magnesium (Mg), sodium (Na), iron (Fe), Zinc (Zn), and manganese (Mn) were determined in leave of jojoba (*Simmondsia chinensis* L.) during five year life cycle. Total N, P, K, Ca, Mg, Na, Fe, Zn and Mn concentration decreased, where as that Ca, Mg and Mn increased during the season. Iron concentration fluctuated around a mean value. Total N, P, K, Mg and Cu concentrations detected in young leave were at the sufficient level, whereas Ca, Fe, Mn and Zn concentrations were at high levels. Nutrient accumulation reduction in leaves by influence of the growing fruits were estimated by total N 8.29%, P 5.16%, K 46.33%, Ca 1.85%, Mg 36%, Na 52%, Fe 7.47%, Zn 47.17% and Mn 17.77% of the maximum nutrient value of the young leave (1 year). Old leave (3 year) preserved nutrient before leaf fall or fruit ripe as total N 65.5%, P 85.72%, K 25.09%, Ca 98.14%, Fe 3.4%

Key words : *Macro-nutrients, micro-nutrients, nutrient accumulation.*