

# Contents

## BOTANY

- Scogings, P.F., Hattas, D., Skarpe, C., Hjältén, J., Dziba, L., Zobolo, A. & Rooke, T. Seasonal variations in nutrients and secondary metabolites in semi-arid savannas depend on year and species ..... 54
- Imada, S., Matsuo, N., Acharya, K. & Yamanaka, N. Effects of salinity on fine root distribution and whole plant biomass of *Tamarix ramosissima* cuttings ..... 84

## ZOOLOGY

- Sivan, J., Kam, M., Hadad, S., Degen, A.A. & Rosenstrauch, A. Body size and seasonal body condition in two small coexisting desert snake species, the Saharan sand viper (*Cerastes vipera*) and the crowned leafnose (*Lytorbynchus diadema*) ..... 8
- Welch, R.J., Bissett, C., Perry, T.W. & Parker, D.M. Somewhere to hide: Home range and habitat selection of cheetahs in an arid, enclosed system ..... 91
- Dáttilo, W., Aguirre, A., Flores-Flores, R.V., Fagundes, R., Lange, D., García-Chávez, J., Del-Claro, K. & Rico-Gray, V. Secretory activity of extrafloral nectaries shaping multitrophic ant-plant-herbivore interactions in an arid environment ..... 104
- Norfolk, O., Power, A., Eichhorn, M.P. & Gilbert, F. Migratory bird species benefit from traditional agricultural gardens in arid South Sinai ..... 110

## SOIL AND WATER

- Cantalice, J.R.B., Melo, R.O., Silva, Y.J.A.B., Cunha Filho, M., Araújo, A.M., Vieira, L.P., Bezerra, S.A., Barros, G. Jr. & Singh, V.P. Hydraulic roughness due to submerged, emergent and flexible natural vegetation in a semiarid alluvial channel ... 1
- Tesfaye, M., Tsidu, G.M., Botai, J., Sivakumar, V. & deW. Rautenbach, C.J. Mineral dust aerosol distributions, its direct and semi-direct effects over South Africa based on regional climate model simulation. .... 22
- Tapia-Torres, Y., López-Lozano, N.E., Souza, V. & García-Oliva, F. Vegetation-soil system controls soil mechanisms for nitrogen transformations in an oligotrophic Mexican desert ..... 62

## FIRE

- Moffet, C.A., Taylor, J.B. & Booth, D.T. Postfire shrub cover dynamics: A 70-year fire chronosequence in mountain big sagebrush communities. .... 116

## GRAZING

- Zhu, L., Johnson, D.A., Wang, W., Ma, L. & Rong, Y. Grazing effects on carbon fluxes in a Northern China grassland. .... 41

## SHORT COMMUNICATIONS

- Padilla, F.M., Miranda, J.D., Armas, C. & Pugnaire, F.I. Effects of changes in rainfall amount and pattern on root dynamics in an arid shrubland ..... 49
- Carevic, F.S., Delatorre, J. & Arenas, J. Physiological strategies during frost periods for two populations of *Prosopis burkartii*, an endangered species endemic to the Atacama desert. .... 79
- Zapletal, M., Sodnompil, B., Atwood, J.L., Murdoch, J.D. & Reading, R.P. Fine-scale habitat use by Daurian hedgehogs in the Gobi-steppe of Mongolia ..... 100

## LAND DEGRADATION

- Geeson, N., Quaranta, G., Salvia, R. & Brandt, J. Long-term involvement of stakeholders in research projects on desertification and land degradation: How has their perception of the issues changed and what strategies have emerged for combating desertification? ..... 124

## PERENNIAL VEGETATION

- Berhané, A., Totland, Ø., Haile, M. & Moe, S.R. Intense use of woody plants in a semiarid environment of Northern Ethiopia: Effects on species composition, richness and diversity ..... 14
- Shackleton, R.T., Le Maitre, D.C. & Richardson, D.M. *Prosopis* invasions in South Africa: Population structures and impacts on native tree population stability ..... 70