

THÈME 01 : Bio-écologie de la steppe et exploitation des bio ressources agro-sylvo-pastorales.

Titre de la présentation affichée :

**Photochemical and morpho-metric analysis of a steppe vegetation
in relation with the parameters of stress**

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Résumé

The steppe ecosystem is subject to constraints that can influence the physiological behaviour of its plant groups. This work aims to interpret the relationships between plant groups and biochemical and physiological parameters of stress in a plantation under semi-arid climate in the region of Sebgaq in the north-west of the wilaya of Laghouat. In a plantation of *Atriplex canescens*, we carried out a floristic study and measurements of water, total sugars, chlorophyll and proline in the fresh leaves of the inventoried species. The results obtained report a total richness of seven species belonging to six families. These species form four groupings in the space they occupy, first grouping *Artimisia alba turra*, second grouping of *Retama reatam* with *Atriplex canescens*, the third grouping is that of *Stipa tenacissima* with *Echinops spinosus* and the last grouping is that of *Salvia verbenaca* alone. More than 80% of the space is occupied by the grouping of the planted species *Atriplex canescens*, this occupation would be at the origin of a rather low index of Shanonn (1.09) and a low Equitability (38%). Measurements of stress parameters reveal that the grouping of the planted species *Atriplex canescens* and *Retama raetam* is the least stressed

Mots-clés : Steppe, climate variation, plant grouping, stress, proline