

VEGETATION COVER, RESOURCES CONSERVATION AND PROTECTION IN WESTERN ALGERIA

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Abstract. The Algerian tell, especially the area of Tlemcen, has a flora and vegetation of the most remarkable in its diversity including Algeria. We are currently witnessing an abuse of this wealth by man for survival with accelerated harvesting of these resources beyond their renewal capacity and because of the strong anthropic pressure. These species are used either for timber and fuel (firewood, etc.). Either as golf course (agro-forestry-pastoral system). Climatic variations (rainfall, temperature) proved a major change process that sward. However, the dynamics of these formations can understand their current extension has been and is still under the influence of human pressure becoming stronger; mainly through voluntary clearings (fertilizer use), grazing (addition of organic matter) and fires (flammable and combustible species). It now seems necessary to develop research programs to understand the genesis of this green energy by using new technologies.

Keywords: Anthropogenic-agro-forestry-pastoral-New Technologies Fire-green-energy-Oran-Tlemcen Algeria.

INTRODUCTION

It is difficult now to try to establish a quantified assessment of species (green energy) that have missing and / or endangered. Conservation and regeneration of the forest, or at least what remains in the area of Tlemcen, are very worrying. Many research programs, through international publications, underlines the major role in various areas of the area of Tlemcen as main reservoir of plant biodiversity.

According to the balance of flora in the area of Tlemcen [1], [2], [3], several endemic species are classified as endangered and are a facies of some degradation. In fact, known by their decreasing numbers, endemic as eg *Delphinium mauritanicum*, *Genista tricuspidata*, *Hippocrepis minor subesp mumbyana*, *Scrofularia laevigata*, *Thymus ciliatus ssp coloratus*, *Centaurea parviflora*, *Helianthemum helianthemoides*, *Thymus algeriensis* still seem difficult to resist action of man. However, their use of space is strongly affected.

METHODOLOGY

The classical methods of plant ecology and botany (the Montpellier-Zurico [4] and the linear method are used. Methods These methods are based on field data, floristic inventories, knowledge of the flora and vegetation of the area. floras used for identification of taxa are: the new flora of Algeria [5] the flora of Sahara [6] the flora of Algeria [7] and the vast flora color [8]. The choice of working scale is important; for our case, we

stationelle based on large-scale study. Finally we used all documents mapped the area of Tlemcen (soil maps, geological maps, bioclimatic cards, slope).

RESULTS

Tlemcen is one of the richest areas of plant biodiversity combined with high endemism. But this area undergoes a very important and relatively recent anthropogenic impact (urbanization, removal, coal). Conserving plant biodiversity in the area, in the present state of affairs poses a serious challenge for managers of natural environments.

The phytohistoriques disciplines show that new taxa (spiny and / or toxic) began to occupy an important place in the ecosystem of the area of Tlemcen [9] [10]. Charcoal can help us locate former stands [11]. A similar study was initiated by our researchers Marseille (France) on the forest Tetraclinis of Honain (Tlemcen). We are currently in the exploration pollen, macro-tissue remains and charcoal. Quantitative floristic changes observed in the various selected sites from the coast to the steppe seem more meet human and animal extreme pressure but also to climatic deterioration. [9]. The results obtained show that the sclerophyllous species became dominant with the widespread human impact of the Tlemcen area (Figure 1). In our area, the pre-matorrals forests are currently dominated by Therophytes [10].

List of Threatened Species

<i>Adenocarpus decorticans</i>	<i>Hippocrepis coronarium</i>	<i>Ononis spinosa</i>
<i>Alchemilla arvensis subsp. microcarpa</i>	<i>Asiragalus mauritaniensis</i>	<i>Cenchrus ciliaris</i>
<i>Gagea granatei subsp. Chaberti</i>	<i>Kremeriella cordylocarpus</i>	<i>Ophrys atlantica subsp. durieui</i>
<i>Allium moly</i>	<i>Asphodelus acaulis</i>	<i>Centranthus angustifolius subsp. battandieri</i>
<i>Galium verticillatum</i>	<i>Lappula barbota</i>	<i>Orchis collina</i>
<i>Allium vineale</i>	<i>Astragalus faurei</i>	<i>Centranthus macrosiphon</i>
<i>Genista quadriflora</i>	<i>Lathyrus montanus</i>	<i>Orchis elata subsp. durandoi</i>
<i>Anagalis tenella</i>	<i>Avena filifolia</i>	<i>Cephalaria syriaca</i>
<i>Genista quadriflora subsp. atlantica</i>	<i>Lemma gibba</i>	<i>Ornithopus pinnatus</i>
<i>Anagyris foetida</i>	<i>Bellis silvestris (varieté pappulosa et genuina)</i>	<i>Cerastium hirtellum subsp. echinulatum</i>
<i>Genista quadriflora subsp. ischnoclada</i>	<i>Linaria latifolia</i>	<i>Papaver malviflorum</i>
<i>Anarrhinum fruticosum</i>	<i>Braxireon humile</i>	<i>Cistanche mauritanica</i>
<i>Gomphocarpus fruticosus</i>	<i>Linaria villosa</i>	<i>Polygonum equisetiforme</i>
<i>Andryala floccosa</i>	<i>Bupleurum montanum</i>	<i>Cistanche phelipaea</i>
<i>Halimium umbellatum</i>	<i>Lonopodium prolongi</i>	<i>Quercus rosea</i>
<i>Anthémis pedunculata subsp. granulata</i>	<i>Calepina irregularis</i>	<i>Cistanche violacea</i>
<i>Hammatolobium kremerianum</i>	<i>Malcolia littorea</i>	<i>Radiola linoides</i>
<i>Anthyllis cytisoides</i>	<i>Carex gracilis subsp. mucronatâMalope malachoides subsp. tripartita</i>	<i>Cistus sericeus</i>
<i>Helianthemum appeninum</i>	<i>Carex mairii</i>	<i>Rochelia disperma</i>
<i>Antirrhinum ramosissimum subsp. tortuosum</i>	<i>Mantisalca durieui</i>	<i>Cladanthus arabicus</i>
<i>Helianthemum murbeckii</i>	<i>Carthamus arborescens</i>	<i>Romulea rollei var. algerka</i>
<i>Arctium minus</i>	<i>Melilotus speciosa</i>	<i>Clypeola cyclodontea Sambucus ebulus</i>
<i>Helianthemum sanguineum</i>	<i>Carthamus carthamoïdes</i>	<i>Cnicus benedictus</i>
<i>Arenaria pomelii</i>	<i>Nepetella tuberosa subsp. reticulata</i>	<i>Sarcocapnoç crassifolius</i>
<i>Helianthemum viscarium</i>	<i>Carthamus pectinatus</i>	<i>Convolvulus valentinus subsp. pseudo-siculusSatureja bqtandieri</i>
<i>Armeria ebracteata</i>	<i>Onobrychis caputgali</i>	
	<i>Celsia faurei</i>	

<i>Convolvulus valentinus subsp. suffruticosus</i>	<i>Thesium humifusum</i>	<i>Trifolium nigrescens</i>
<i>Scirpus caespitosus</i>	<i>Erodium praecox</i>	<i>Euphorbia sulcata</i>
<i>Crambe kralikii</i>	<i>Thymus capitatus</i>	<i>Tuberaria echioides</i>
<i>Scolymus grandiflorus</i>	<i>Eruca setulosa</i>	<i>Evax argentea</i>
<i>Crocus mauritii</i>	<i>Thymus commutatus</i>	<i>Verbascum mattaria</i>
<i>Sideritis montana</i>	<i>Euphorbia bupleuroides subsp. Eubupleuroides</i>	<i>Filago heterantha subsp. dichotoma</i>
<i>Crocus nevadensis</i>	<i>Trifolium campestre subsp. micranthum</i>	<i>Verbascum maurum</i>
<i>Silène conica</i>	<i>Euphorbia clementei</i>	<i>Fritillaria messanensis subsp. Verbascum sirhplex</i>
<i>Cuscuta monogyna</i>	<i>Trifolium isodon</i>	<i>Fumana macrosepala</i>
<i>Tetragonolobus requieni</i>	<i>Euphorbia dracunculoides sbsp. volutiana</i>	<i>Veronie praeooxi</i>
<i>Cytisus triflorus</i>	<i>Trifolium laevigatum</i>	<i>Fumana munbyi</i>
<i>Tetragonolobus biflorus</i>	<i>Euphorbia nicaensis</i>	<i>Vincetoxicum officinale</i>
<i>Delphinium emarginatum</i>	<i>Trifolium ligusticum subsp. gemellum</i>	<i>Fumaria vaillantii</i>
<i>Tetragonolobus purpureus</i>	<i>Euphorbia squamigera</i>	<i>Gagea algeriensis Orlaya platycarpus</i>
<i>Delphium peregrinum</i>		
<i>Teucrium fruticans</i>		
<i>Echium flavum</i>		

Table 1

Biological Type

Phanérophytes	8.55%
Géophytes	7.33%
Chamaephytes	26.11
Hémicryptophytes	9.34%
Thérophytes	48.67%

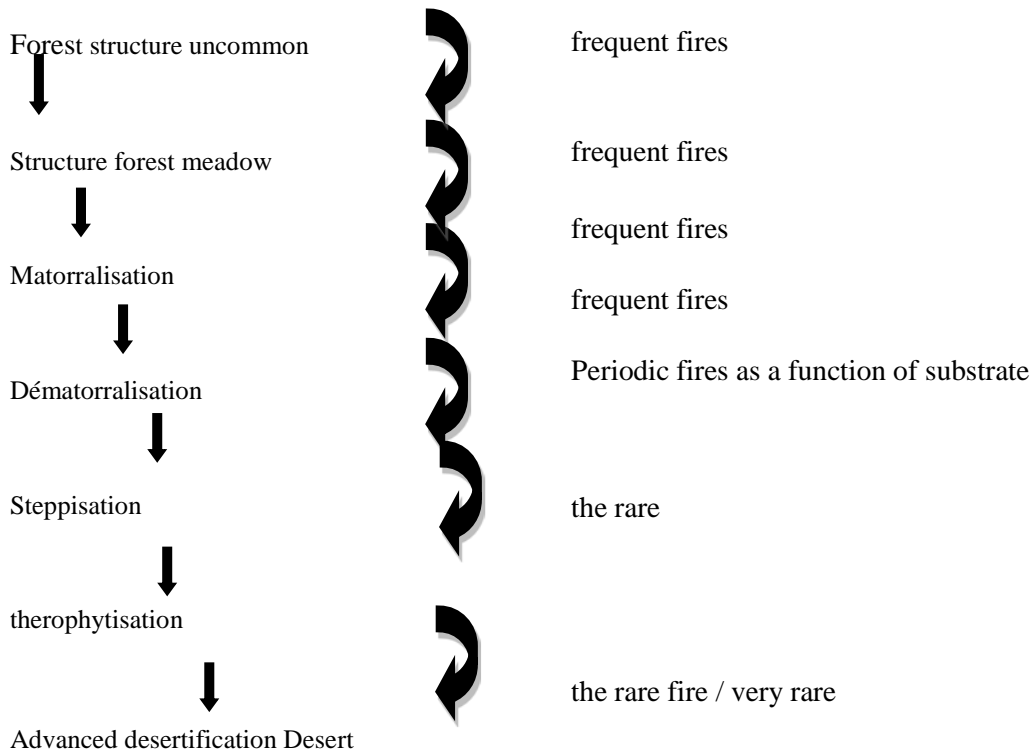


Fig. 1. Dynamics of vegetation [12]

CONCLUSION AND PERSPECTIVES

Among families inventoried, we have many xerophytes and especially officinal families. This is the case Rhamnaceae, Fabaceae, Lamiaceae, of Césalpinées, Asteraceae and Boraginaceae. Flora in the region of Tlemcen, not lack of significant exploitable resources by the existence of plants already known for its medicinal properties and / or food. [13] These plants have the obvious advantage of a constant renewal, and a great source of high added value and continuous production; the opposite of certain energy sources (called fossil fuels) such as coal or oil, which can only be exhausted. However, the species richness is not uniform and is exposed to great danger of extinction. Alarm bells pushed past 25 years by researchers to stop the destruction of the biological capital found no echo until now. It seems to ignorance of the biological value and vulnerability, only management measures with land control would ensure sustainable conservation of these extremely fragile ecosystems. The conservation and protection of endangered taxa begins with ecological planning and careful forest management. Should be the areas where the atmosphere asylvatique persists, are at least partially included in Tlemcen National Park, before the phenomenon of degradation immediately disrupts their balance or their existence. Finally, for the protection and conservation of these ecosystems; it is not enough to protect areas rich in species but also species-poor areas.

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