PLANTS OF ALGERIAN SEMI-ARID REGIONS USED FOR THE TREATMENT OF GASTRO-INTESTINAL DISORDERS

A. CHERITI', N. BELBOUKHARI[1], K. SEKKOUM [1] & S. HACINI [2]

[1] Laboratoire de Phytochimie & Synthèse Organique, Centre Universitaire de Béchar, 08 000-Béchar.
Karimcheriti@yahoo.com
Département de Chimie, Faculté des Sciences, Université d' Oran-Es-Senia, 31 000, Oran..

ABSTRACT

A great variety of medicinal plants grows in the semi-arid region qf El-Bayadh (South — West•qf Algeria). Among this fora, some species are traditionally used bv local populations for the treatment of gastro-intestinal disorders. We describe in this paper, 62 species (29 botanical familles) of these plants, selected alter an ethnopharmacological survey in El-Bayadh district.

Key words: medicinal plants, gastro intestinal disorders, semi arid zones, El Bayadh, Algeria.

RESUME

Une grande variété de plantes médicinales pousse dans la région semi-aride d'El-Bayadh (Sud-Ouest Algérien). Parmi cette flore, certaines espèces sont traditionnellement utilisées par les populations locales pour le traitement de troubles gastro-intestinaux. Dans cet article, nous décrivons 62 espèces (29 familles botaniques) de ces plantes, sélectionnées après une étude ethnopharmacologie dans la région d'El - Bayadh.

Mots-clés: plantes médicinales, troubles gastro-intestinaux, zones semi-arides,E1-Bayadh, Algérie.

I. INTRODUCTION

According to the World Flealth Organisation (W.H.0), phytotherapy is an important alternative in health treatment in most countries [1, 2]. Algeria, rich in indigenous herbal resources which grow on its varied topography and under changing climatic conditions permitting the growth of almost 3000 plant species. In the semi — arid regions, local traditional pharmacopoeia continues to be an important source of remedies for primary healthcare, so the region affords ample scope for studies concerning various aspects of folk medicine.

Continuing our effort to provide a data base for traditional health practices and to research bioactives substances from medicinal plants of South — West Algeria [3 - 8], we present in this communication the result of the study on ethnomedicine of El - Bayadh district for the treatment of gastro-intestinal disorders: digestives, esophageal, colonie and rectal.

II. RESULTS AND DISCUSSION

The traditional uses of medicinal plants for the treatment of gastrointestinal disorders were selected on the basis of an ethnopharmacological survey of El Bayadh

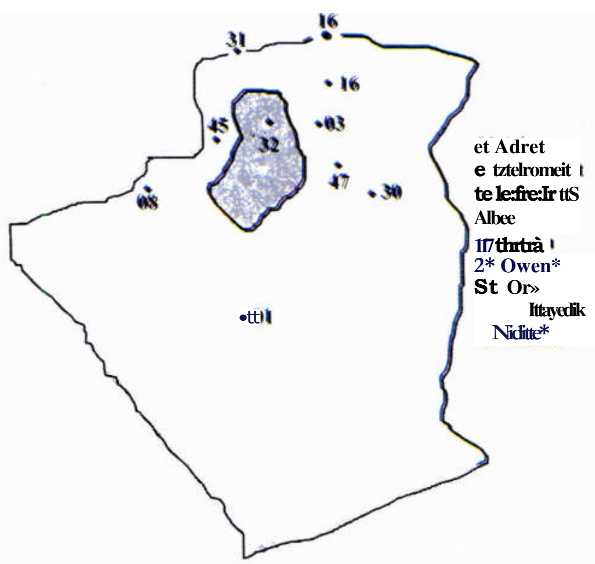
district [(Fig. 1), area of 70539 Km^2 between 31° and 34° North latitude and 0° and 2° East longitude [9], through interviews according to our previous works [3, 6].

The medicinal plants used (62 species belonging to 29 families) are ordered alphabetically by botanical families, followed by botanical name, local name and plant parts used by the local inhabitants (Table 1). Specimens of listed plants were authenticated by referring to the herbarium of the "Direction de l'agriculture de la wilaya d'El Bayadh". Literature [10, 11 was consulted to verify the taxonomical identity of plants.

The Asteraceae family predominates with 7 species, followed by Apiaceae (6), Fabaceae (6)], Labiaceae (5)], Rosaceae (4) and Anacardiaceae (3), represent altogether 50 % of the quoted plants.

The decoction is the most prevalent method of preparation of plant remedies, probably because of its simplicity, the treatment is repeated 2 - 3 tintes / day.

Fig. 1: The study area of El Bayadh - Algeria —



Families / Species	Local name	Parts used
AMPELIDACEAE		
Vitis vinifera L.	dalia	Fr
ANACARDIACEAE		
Pistacia atlantica Desf.	Lebtom	Fr
Pistacia lentiscus L.	tharw	L
Rhus oxyacantha Sch.	jedari	Rt
APIACEAE		
Carum carvi L.	karwiya	Fr
Coriandrum sativum L	gosber	Ap
Cuminum cyminum L.	kemoun	Fr
Fendu narthex L.	hentit	R
Foeniculum officinalis All.	besbas	L
Pimpinella anisum L.	habet hlawa	Fr

Familles / Species	Local name	Parts used
ASTERACEAE		
Anacyclus valentinus L	guertofa	Ap
A. herba-alba Asso.	chih	Ap
Atractylis gunnifera L.	adad	Rt
Atractylis htundis L.	knoud	Rt
Carthanius tinctorius L.	zâfrane	
Erigeron canadensis L.	djouâda	Ap
Rhoelpenea finie Bull.	laâdid	
CACTACEAE		
Opuntia f cas indica L.	karmos ensara	Fr
CAPPARIDACEAE		
Capparis spinosa L.	kebar	L
Cleome arabica L.	gefena	Wp

Families / Species	Local name	Parts used
RUTACEAE		
Ruhr chalepensis L.	feyjel	L
SOLANACEAE		
Capsicum (minium L.	lahror	Fr
Lycopersicum esculentum. Mill	Tamatich	Fr
TAMARICACEAE		
Tamarix gallica L.	leârich	Fr. B

Families / Species	Local name	Parts used
TERNSTROEMIACEAE		
Thea sinensis Sims.	latay	L
THYMELEACEAE		
Daphne gnidium L.	lazez	L

Families Species	Local name	Parts used
CI IENOPODIACEAE		
llalaxvlon articulatum Bon.	remth	L
CUCURBITACEAE		
Cueu•bita pepo L.	kabouya	
Echallium elaterium. Rich.	fegous lehrn r	Fr
CUPRESSACEAE		
Juniperus oxycedrus L.	taga	L
J. phoenicea 1...	arar	L
FABACEAE		
Ceratonia .siliqua L.	kharoub	Fr
L'ilion lens L.	âdes	s
Ononis natrix L.	henat libel	Ap
Robin in pseudaeacia L	mazhar	F
graecum L	helba	
Vicia tuba L.	foul	
FAGACEAE		Fr
Ouercus filer L.	kerouche	F
1 RIDACEAE		
Crocus sativus L.	zâfrane hoi	Ap
GERANIACEAE		
Erodium guttatum Desf.	regam belout	
LABIACEAE		
Ajuga ira L. Schreb.	chentgoura	Ap
Lavandula stoecllas L.	hantai	Ap
Mentha pulegium L.	lliyo	Ap
Ph/omis hiloha Desf.	khayata	L
Thrnntc capirams L.	zâtar	L

Families / Species	Local name	Parts used
LAURACEAE		
Cinnamomum cassia Blum	gaffa	B
Laurus nobilis L.	rand	L
LINACEAE		
Linum usitatissimum L.	kettan	S
LYTHRACEAE		
Lawsonia inermis L.	henna	L
MORACEAE		
Morus alba L.	tut	Fr
M. nigra L.	tut lakehal	Fr
MYRTACEAE		
Eugenia earyophyllata Thumb	cironfel	F
Mvrtus communis L.	rayhanc	F
PEDALIACEAE		
S'escrimai, inclicuni D.C.	djendjelene	S
PI PERACEAE		
Piper cubeba L.	kebaba	Fr
P. nigrum L.	hab elkahla	Fr
POACEAE		
Stipa tenacissima L.	halfa	L
POLYGONACEAE		
Rumex gallicus Rech.	homaida	
ROSACEAE		
Prunus amygdalus Stok.	lawz	Fr
P. domestica L.	bercioq	Fr
P. persica L.	khokh	
Rosa canina L.	ward	

Ap (Aerial parts), B (Bark), F (Flower). Fr (Fruit), L (Leaf), R (Resin), Rt (Root), S (Seed), Wp (Whole plant).

Table 1: Medicinal plants used for treatment of gastro-intestinal disorders in El - Bayadh district

CONCLUSION

62 plants of folk drugs were Pound to be currently used for treatment of gastro-intestinal disorders in El - Bayadh district, have been identified. These plants are distributed in 29 botanical familles mostly in Asteraceae (7), Apiaceae (6), Fabaceae (6), Labiaceae (5), Rosaceae (4) and Anacardiaceae (3), all other familles were represented by two or one species each.

The information in this report will help in preserving knowledge on medicinal plants and should direct biologist and phytochimist in the search for promising species and bioactive constituents. Thus traditional medecine is a valuable source for the development of new effective therapeutic agents.

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