

Contents

1	Introduction	1
1.1	Introduction	1
1.2	Morphology	3
1.3	Conservation Measures	4
1.4	Conclusion	5
	References	6
2	Phytochemical Screening and HPLC Analysis of <i>Artemisia amygdalina</i>	7
2.1	Qualitative Analysis	7
2.1.1	Presence of Tannins	8
2.1.2	Presence of Alkaloids	8
2.1.3	Presence of Saponins	9
2.1.4	Presence of Cardiac Glycosides	9
2.1.5	Presence of Terpenes	9
2.1.6	Test for Steroids	9
2.1.7	Test for Flavonoids	9
2.1.8	Presence of Phenolics	10
2.1.9	Presence of Resins	10
2.2	HPLC Analysis	10
	References	13
3	Volatile Composition of <i>Artemisia amygdalina</i>	15
3.1	Oil Analysis	16
3.2	Conclusion	23
	References	23
4	Phytochemical Analysis and Chemobiological Standardization of <i>Artemisia amygdalina</i>	25
4.1	Introduction	26
4.2	Phytochemistry	26

4.3	Biological Evaluation	30
4.3.1	Bioactivity of the Extracts and Isolated Constituents Using SRB Assay	30
4.3.2	Bioactivity of Ludartin Using MTT Assay	30
4.4	HPLC Analysis	32
4.4.1	Linearity	33
4.4.2	Accuracy	34
4.4.3	Precision	35
4.4.4	Percentage of the Constituents	36
4.5	Conclusion	37
	References	37
5	Biological Profile of <i>Artemisia amygdalina</i>	39
5.1	Free Radical Scavenging Activity Potential of <i>Artemisia amygdalina</i>	40
5.2	Anti-inflammatory and Immunomodulatory Potential of <i>Artemisia amygdalina</i>	43
5.2.1	Carrageenan-Induced Paw Edema	45
5.2.2	Humoral Antibody Titer	46
5.2.3	Delayed-Type Hypersensitivity	47
5.2.4	Anti-diabetic Potential of <i>Artemisia amygdalina</i>	48
5.2.5	Acute Oral Toxicity	49
5.2.6	Antihyperglycaemic Effect of <i>Artemisia amygdalina</i>	49
5.2.7	Effect of Extracts of <i>Artemisia amygdalina</i> and Glibenclamide on Various Biochemical Parameters in Rats	50
5.2.8	Effect of Extracts of <i>Artemisia amygdalina</i> and Glibenclamide on Feed Consumption and Water Consumption in Rats	52
5.2.9	Effect of Extracts of <i>Artemisia amygdalina</i> and Glibenclamide on Body Weight in Rats	52
5.2.10	Histopathology	52
5.2.11	Oral Glucose Tolerance Test (OGTT)	55
5.3	Conclusion	58
	References	58

Chemical and Pharmacological Perspective of *Artemisia
amygdalina*

Lone, S.H.; Bhat, K.A.; Khuroo, M.A.

2015, VII, 58 p. 38 illus., 29 illus. in color., Softcover

ISBN: 978-3-319-25215-5