Medicinal Plants in Holy Bible – a literature review

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ABSTRACT

The Holy Scripture is also the first text revealing the utility of plants for man, as natural sources of food, wood, fibres, oils and medicinal herbs. In the last 60 years, several distinguished botanists have attempted to identify the scientific names of the plants cited in the Bible. They were used in *medicine* such as; anise, caraway, cardamom, cassia, coriander, fennel, fenugreek, garlic, mustard, onions, poppy seed, saffron, sesame and thyme etc. According to result; Important and commonly available 64 plants discussed specially within 133 plants such as taxonomically classified into; Herbs 37%, Shrubs 27% and Trees 19% in other result; parts used in medicinal purposes as, Leaves – 25 plants, Seeds 13 plants, Fruits – 10, Flowers – 08, Bulbs 07, Whole Plants – 04, Barks – 04, Roots – 02 plants and Latex, Resin, Rhizome, Stem, Stigma, Tuber, and Wood were only one plant.

Key-words: Holy Bible, Medicinal Plants, taxonomy of Plants, plants parts

INTRODUCTION:

The **Bible** (from Koine Greek τὰ βιβλία, *tà biblía*, "the books") is a collection of sacred texts or scriptures. Varying parts of the Bible are considered to be a product of divine inspiration and a record of the relationship between God and humans by Christians, Jews, Samaritans, and Rastafarians.

The Holy Scripture is also the first text revealing the utility of plants for man, as natural sources of food, wood, fibers, oils and medicinal herbs. In the last 60 years, several distinguished botanists have attempted to identify the scientific names of the plants cited in the Bible [3] [4] [4] [5] [6] [7] [7] [8].

Moreover, in the recent past, a combination of data obtained empirically together with the most technically advanced experimental laboratory and clinical procedures, has given us a number of our most important contributions to our well-being [19] [20] [21]. The physician, the laboratory scientist and the botanist can now hopefully join forces in a united search for more effective diuretics. In this research investigator plan to identify plants which are mentioned in Holy bible with strong evidence verses and its pictures that are available or not in present.

RESULT:

S. No.	Plant	Reference	
1	Abraham's Bush (Vitex agnus-castus L.), but perhaps most probably Blackberry (Rubus sanctus)	Exodus 3:2	
2	Acacia, Spirale (Acacia raddiana Savi)	Exodus 25:10	
3	Acacia, Tortilis and/or Acacia, Negev (Acacia gerrardii Bentham subsp. negevensis)	Exodus 37:17	
4	Algum Tree; traditionally thought to denominate Red Sandalwood (Pterocarpus santalinus) and/or White Sandalwood (Santalum album), but a few claim it is Juniper (Juniperus excelsa)	2 Chronicles 2:8; 9:10, 11; 1 Kings 10:11, 12	
5	Almond (Amygdalus communis)	Genesis 43:11	
6	Almug (Pterocarpus santalinus)	1 Kings 10:11	
7	Agarwood ("Aloe") (Aquilaria malaccensis)	Proverbs 7:17	
8	Aloe (Aloe succotrina)	Proverbs 7:17	
9	Anemone (Anemone coronaria L.)	Matthew 6:28	
10	Anise (Dill) (Anethum graveolens)	Exodus 30:34	
11	Apple (Malus domestica)	Genesis 2:7; Job 31:39; Jeremiah 15:9, Proverbs 25:11	
12	Barley (Hordeum spp.)	Numbers 5:15	
13	Bay (Laurus nobilis)	1 Corinthians 9:25	
14	Bdellium (Commiphora africana) (Hebrew, bedho?lach).	Numbers 11:7	
15	Bean (Vicia faba)	Ezekiel 4:9	
16	Box (Buxus sempervirens)	Isaiah 41:19	
17	17 Boxthorn (Lycium europaeum) Proverbs 22:5		
18	Bramble (Rubus ulmifolius)	Judges 9:15	
19	Cane (Arundo donax)	Isaiah 43:24, Jeremiah 6:20	
20	Broom, Spiny (Calycotome villosa (Poiret)	Psalm 120:4	
21	Broom, White (Retama raetam (Forssk.)	1 Kings 19:4, Psalm 120:4	

22	Broom, Yellow (Spartium junceum)	Psalm 120:4
23	Bulrush (Typha spp.) or Papyrus (Cyperus papyrus)	Exodus 2:3, Job 40:21
24	Burning Bush (Loranthus acaciae)	Exodus 3:1, 2
25	Caper, Desire (Capparis spinosa L.)	1 Kings 4:33
26	Camphire (Lawsonia inermis)[1]	Song of Songs 1:14
27	Carob and Locust (Ceratonia siliqua)	Luke 15:16, Matthew 3:1
28	Cassia (Cinnamomum iners)	Exodus 30, Psalm 45:8, Job 42:14
29	Castor Oil Tree ("Jonah's gourd") (Ricinus communis L.)	Jonah 4
30	Cedar of Lebanon (Cedrus libani Loud.)	1 Kings 5:10, 2 Kings 19:23
31	Chamomile (several species)	Isaiah 40:6
32	Chaste Tree (Vitex agnus-castus)	Job 40:21
33	Plane (Platanus orientalis L.)	Luke 17:6
34	Chicory (Cichorium spp.)	Numbers 9:9
35	Cinnamon (Cinnamomum zeylanicum)	Proverbs 7:17
36	Cockle (Agrostemma gitago)	Isaiah 28:23
37	Coriander (Coriandrum sativum)	Exodus 16:31
38	Cotton (Gossypium herbaceum)	Esther 1:6
39	Crocus (Crocus sativus)	Song of Solomon 4:13
40	Crown Daisy (Chrysanthemum sp.)	Isaiah 40:6
41	Crown of Thorns (Paliurus spina-christi)	Mark 15:15
42	Cucumber (Cucumis melo)	Numbers 11:5
43	Cumin (Cumimum cyminum)	Isaiah 28:27
44	Cypress (Cupressus sempervirens L.)	Isaiah 44:14
45	Date Palm (Phoenix dactylifera)	Song of Solomon 5:11; 7:7, 8, John 12:13
46	Dill (Anethum graveolens)	Exodus 30:34
47	Dove's Dung (Ornithogalum narbonense)	2 Kings 6:25
48	Fig (Ficus carica L.)	Joel 1:7
49	Fitches (Black Cumin) (Nigella sativa)	Isaiah 28:23
50	Flax (Linum usitatissimum)	Proverbs 31:13
51	Flowers, unidentified	1 Kings 7:26
52	Frankincense (Boswellia thurifera)	Matthew 2:10, 11
53	Galbanum (Fennel) (Ferula galbaniflua)	Gospel of Matthew 23:23
54	Gall (Papaver somniferum)	Book of Lamentations 3:19
55	Garlic (Allium sativum)	Numbers 11:5
56	Grape (Vitis vinifera L.)	Genesis 9:20
57	Hedge of Thorns (Solanum incanum L.)	Proverbs 15:19
58	Hemlock (Conium maculatum)	Amos 6:12
59	Henna (Lawsonia inermis L.)	Song of Solomon 1:14
60	Hyssop	Leviticus 14:52
61	Incense (Boswellia sacra)	Hosea 4:13
62	Judas Tree (Cercis siliquastrum)	Matthew 27:3
63	Juniper (J. excelsa)	1 Kings 3-6; 9:11
64	Jujube (Ziziphus spina-christi (L.)	Matthew 27:3
65	Leek (Allium porrum)	Numbers 11:5
66	Lentil (Lens esculenta)	2 Samuel 17:28
67	Iris (then denominated "Lily") (Iris palaestina)	1 Kings 7:22
68	Lily Sand (Pancratium maritimum L.)	1 Kings 7:19
69	Linen (Linum usitatissimum)	Exodus 35:25
70	Mallow (Atriplex halimus L.)	Job 30:4
71	Mandrake (Mandragora autumnalis Bertol.)	Genesis 30:15

72	Manna (Alhagi camelorum)	Numbers 11:7
73	Marjorum (Origanum majorana)	Leviticus 14:4
74	Mint (mentha viridis)	Matthew 23:23
75	Mulberry, Black (Morus nigra L.)	2 Samuel 5:23-24
76	Mustard (Brassica nigra)	Matthew 13:31
77	Myrrh (Commiphora abyssinica Engl.)	Song of Solomon 4:6
78	Myrtle (Myrtus communis L.)	Isaiah 55:13
79	Nettle (Acanthus spinosus)	Song of Solomon 4:14
80	Nigella (Nigella sp.)	Isaiah 28:26
81	Nuts / Pistachio (Pistacia vera L.)	Song of Solomon 6:11
82	Nuts / Walnut (Juglans regia L.)	Song of Solomon 6:11
83	Oak (Quercus calliprinos Webb)	Joshua 24:26
84	Oak (Quercus ithaburensis Decaisne)	Joshua 24:26
85	Oak (Valonia Oak (Quercus aegilops)	Genesis 35:8
86	Olive (Olea europaea)	Judges 9:9
87	Onion (Allium cepa)	Numbers 11:5
88	Palm (Phoenix dactylifera L.)	Song of Solomon 7:8
89	Aleppo Pine (Pinus halepensis)	Isaiah 44:14
90	Pine (Pinus pinea)	Hosea 14:8
91	Fir (Abies cilicica)	1 Kings et cetera
92	Plane (Platanus orientalis L.)	Ezekiel 31:8
93	Pomegranate (Punica granatum)	Song of Solomon 7:12
94	Poplar, White (Populus sp.)	Psalm 137:2
95	Poplar species (Populus sp.)	Isaiah 44:4
96	Reed (see also Cane)	Ezekiel 40:vv., Job 40:21
97	Rye ("Rie")	Isaiah 28:25
98	Rockrose, Pink	Genesis 43:?
99	Rockrose, White	Genesis 43:11
100	Dog Rose ("Wild Rose")	Song of Solomon 2:1
101	Rue (Ruta graveolens)	Luke 11:42
102	Rush (Juncus sp.)	Isaiah 9:14
103	Saffron (Crocus sativus)	Song of Solomon 4:14
104	Sage (Salvia divinorma sp.)	Exodus 3
105	Sage, Land of Israel (Salvia palaestina Bentham)	Exodus 37:17
106	Sage, Pungent (Salvia dominica L.)	Exodus 37:17
107	Sage, Three Leaved (Salvia fruticosa Miller)	Exodus 37:17
108	Sage, Jerusalem (Salvia hierosolymitana Boiss)	Exodus 37:17
109	Sage, Judean (Salvia judaica Boiss)	Exodus 37:17
110	Scarlet Oak (Quercus sp.)	Leviticus 14:48
111	Sedge (sp. of Cyperaceae)	Job 40:21
112	"Spices" (Astrangalus tragacantha)	2 Chronicles 9:1
113	Spikenard (nardostachys jatamansi)	Song of Solomon 4:14
114	Stacte (Styrax officinalis) or Storax (Liquidambar orientalis)	Exodus 30:34
115	Star of Bethlehem (Ornithogalum narbonense)	2 Kings 6:25
116	Sweet Cane (Saccharum officinarum)	Jeremiah 6:20
117	Sweet Flag and Aromatic Cane (Acorus sp.)	Isaiah 43:23
118	Sycamine (Mulberry) (Morus sp.)	Luke 17:5
119	Tamarisk (Tamarix aphylla)	Genesis 21:33
120	"Tares" is speculated to denote Darnel (Lolium temulentum)	Matthew 13:24
121	Terebinth (Pistacia palaestina Boiss)	2 Samuel 18:9
122	Thistle, Golden	2 Chronicles 25:18

123	Thistle	Job 31:40
124	Thorns	Jeremiah 4:3
125	Thyine Wood (Tetraclinis articulata)	Revelation 18:12
126	Timber	2 Kings 12:12
127	Tulip Sharon	Song of Solomon 2:1
128	Grape (Vitis vinifera)	Isaiah 5:1
129	Walnut (Juglans regia)	The Song of Solomon 6:11, Genesis 43:11
130	Wheat	Ezra 7:22
131	Wheat, Egyptian (Triticum compositum)	Genesis 41:22, 23
132	Willow	Job 40:22
133	Wormwood (Artemisia absinthium)	Revelation 8:11

Table 1: Plants list in the Holy Bible.



Botanical name	Common Name (Eng)	Bible Quote	Remarks	
Allium cepa L.	Onion		We remember the fish, which we did eat in Egypt freely; the cucumbers, and the	
Allium porrum L.	Leek	Numbers 11,5:	melons, and the leeks, and the onions, and the garlics: But our soul is dried	
Allium sativum L.	Garlic		away:there is nothing at all, beside this manna, before our eyes.	
	Saffron	Song of Solomon (4,13)	Your plants are an orchard of pomegranates with choice fruits, with henna and nard, and saffron, calamus and Ceylon cinnamon, with every kind of incense tree, with myrrh and aloe and all the finest spices.	
Crocus sativus L.		Isaiah 35:1	The saffron referred to is a yellow powder obtained by collecting and grinding the styles of the crocus. "The desert shall rejoice and the blossoms; like the crocus, it shall blossom abundantly."	
Atriplex halimus L.	Mallow	Job 30,4:	From want and famine they are gaunt. Who gnaw the dry ground by night in waste and desolation, who pluck mallow by the bushes, and whose food is the root of the broom shrub.	
Brassica nigra (L.) Koch	Mastard	Mark 4.31:	It is like a grain of mustard seed, which, when it is sown in the earth, is less than all the seeds that be in the earth: But when it is sown, it grow up, and become greater than all herbs, and shoot out great branches; so that the fowls of the air may lodge under the shadow of it."	
Capparis spinosa L.	Caper	Ecclesiastes 12,5:	When the almond tree blossoms and the grasshopper drags itself along and caper and the caper berry no longer inspires sexual desire.	
Ceratonia siliqua L.	Carob	Luca 15,16:	And he would fain have filled his belly with the carob's husks that the swine did eat; and no man gave to him.	
Cicer arietinum L.	Chickpea	Isaiah 30,24:	The oxen and the asses that till the ground will eat salted chickpea, which has been winnowed with shovel and fork.	
Cinnamomum cassia Blume	Cinnamon	Psalms 45,8:	All your robes are fragrant with myrrh and aloes and cassia; from palaces adorned with ivory the music of the strings makes you glad.	
Cinnamomum zeylanicum Nees	Ceylon Cinnamon	Song of Songs 4,13:	Your plants are an orchard of pomegranates with choice fruits, with henna and nard, and saffron, calamus and Ceylon cinnamon, with every kind of incense tree, with myrrh and aloe and all the finest spices.	

Cistus incanus L.	Rockrose, Ladanum	Genesis 37,25:	They looked up and saw a caravan of Ishmaelites coming from Gilead. Their camels were loaded with spices, balm and ladanum, and they were on the their way to take them down to Egypt.
Citrullus colocynthis (L.)	Schrad Gourd, Wild Colocynth	Kings 7,24:	Under its brim gourds went around encircling it ten to a cubit, completely surrounding the sea; the gourds were in two rows, cast with the rest.
Ficus carica L.		Genesis 3,7:	Fig leaves are not good enough, as they represent man's work, and works will not save anyone.
Hordeum vulgareL.	Barley	Hexodus 9,31:	Now the flax and the barley were battered and ruined [by the hail], because the barley was in the ear (ripe, but soft) and the flax was in bud.
Juglans regia L.	Walnut	Song of Solomn 6,11:	I went down to the grove of walnut trees and out to the valley to see the new spring growth.
Juniperus communis L.	Juniper	Isaiah 41,19:	I will set junipers in the wasteland, the fir and the cypress together.
Malva sylvestris L.	Mallow	Job 6,6:	Can something tasteless be eaten without salt, or is there any taste in the water of mallow?
Vitis vinifera	Grape vine	Genesis 9:21, Psalm 104:15, Matthew 26:27- 29, Isaiah 5:1-10, John15:1	The grapevine is one of the most important plants/fruits of the Holy Land. So it is not surprising that it is frequently mentioned in the Bible. The first reference to it is that unfortunate occurance when Noah became drunk with wine (Genesis 9:21). But many happier incidents are included in both the Old and New Testaments. "Wine gladdens the heart" (Psalm 104:15). Wine was used at symbolic occasions such as the Passover and Last Supper (Matthew 26:27-29). Israel was likened to a vineyard (Isaiah 5:1-10), and Jesus said, "I am the true vine" (John15:1).

Table 2: bible verses of medicinal used plants

Table 3: Most important and repeated quoted plants list in the Holy Bible.

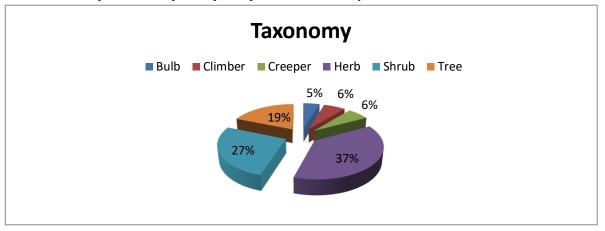


Figure 1: Taxonomical classification of most important plants in holy bible.

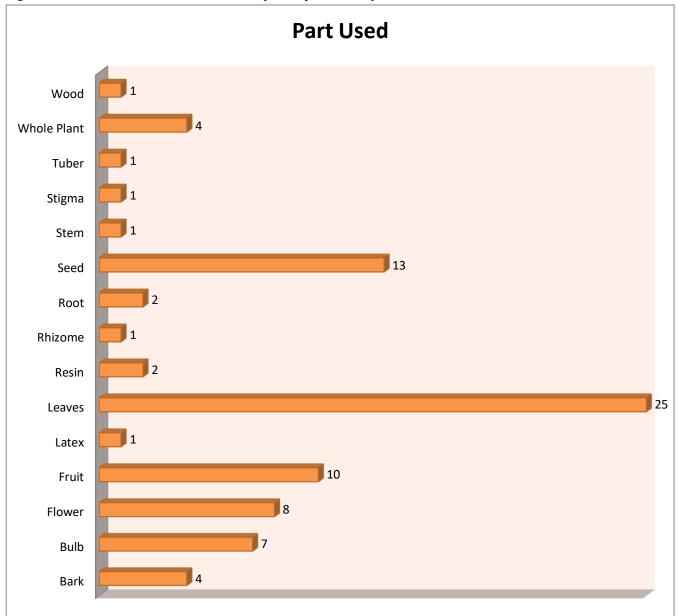


Figure 2: Various parts used in medicinal purpose of most important plants in holy bible.

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No	Botanical name	Name (Eng)	Images	
1	Acorus calamus	Sweet Flag and Aromatic Cane		
2	Allium cepa L.	Onion		
3	Allium porrum L.	Leek		
4	Allium sativum L.	Garlic		
5	Amygdalus communis L.	Almond		
13	Cedrus libani	Cedar		
15	Cercis siliquastrum	Judas Tree or Rosebud Tree		
16	Chrysanthemum indicum	Chrysanthe mum		
18	Cichorium intyb us	Chicory or Bitter Herbs		
20	Cinnamomum zeylanicum Nees	Ceylon Cinnamon	Code Committee Tree	
23	Commiphora gileadensis L.	Balm		
24	Convallaria majalis	Lily of the Valley		

26	Crocus sativus L.	Saffron	
28	Cuminum cyiminum L.	Cumin	
30	Cupressus sempervirens	Cypress	
33	Foeniculum vulgare	Fennel	
37	Juniperus communis L.	Juniper	
39	Lilium candidum	Lily	THE PARTY NAMED IN
42	Malus sylvestris Mill.	Apple Tree	
44	Mentha asiatica	Mint	
45	Myrtus communis L.	Myrtle	
47	Narcissus poeticus	Narcissus	
50	Olea europaea L.	Olive	
51	Ornithogalum umbelletum	Star of Bethlehem or Dove's Dung	M
52	Paperver sominifera	Рорру	

	13 JETH June 2	oro, rolallic	0, 10040
53	Phoenix dactylifera L.	Date Palm	
55	Prunus glandulosa	Almond Tree - Flowering Almond	
56	Rosa berberifolia	Rose	
59	Salvia officinalis	Sage	
60	Silybum marianum	Thistles	
61	Triticum compositum	Wheat (Egyptian)	
62	Tulipa gesneriana	Tulip	10 To
63	Urtica dioica	Nettles	
64	Vitis vinifera	Grape vine	

Table 3: 64 plants and its images list

DISCUSSION & CONCLUSION

According to result;

Then God said let the land produce vegetation: seed-bearing plants and trees that bear fruit with seed in it, according to their various kinds. And it was so. The land produced vegetation: plants bearing seeds according to their kind and trees bearing fruit with seed in it according to their kinds. And God saw that it was good. Genesis 1:11-12 (NIV) besides its religious importance, the Bible, because of its ancient origin represents a relevant witness of the way of life of the people mentioned in it.

Herbs in Biblical times were used in their every day lives. They were used in *medicine* (Ex. anise, caraway, cardamom, cassia, coriander, fennel, fenugreek, garlic, mustard, onions, poppy seed, saffron, sesame and thyme), cosmetic ointments (myrrh), aromatic oils (calamus, frankincense, myrrh), perfumes (spikenard), fumigation (hyssop), religious rituals (hyssop), embalming, and cooking. Embalming was done to appease the gods of death. Herbs touched every aspect of their lives. Their importance made them valuable, to the extent that they even paid their taxes with them. These scholars have provided different lists of plants appearing in the Bible, none of which could be accepted as indisputable. The authors have combined their expertise to focus on the identification of the plants, through an historical analysis of the literature on this research.

finally concluded as; Important and commonly available 64 plants discussed specially within 133 plants such as taxonomically classified into; Herbs 37%, Shrubs 27%, Trees 19%, Creeper – 6%, Climber – 6%, Bulb - 5%. in other result; parts used in medicinal purposes as, Leaves -25plants, Seeds 13 plants, Fruits – 10, Flowers – 08, Bulbs 07, Whole Plants – 04, Barks – 04, Roots – 02 plants and Latex, Resin, Rhizome, Stem, Stigma, Tuber, and Wood were only one plant.

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Conflict of Interest: Nil.

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