

PREPARATION OF ETHEREAL OILS (AL-DUHOUN) BY IBN AL-QUFF (13TH CENTURY A.D.)

SAMIR YAHIA EL-GAMMAL*

ABSTRACT

Ibn Al-Quff was born in Damascus. He learned medicine from Ibn Abi Usaibia. Ibn Al-Quff excelled in medicine as well as in Surgery. He wrote several books, of which was "Al-Oumdah" (The Authority on Surgery). Another book was "Al-Shafi" (The Healer) on medicine. In the book "The Authority on Surgery", Ibn Al-Quff has devoted a special chapter, on the preparation of ethereal oils, which was commonly known as Al-Duhoun. He has described about 34 different oils together with their medical action.

During the 13th Century A.D., there lived in the Eastern part of the Islamic world, an eminent Christian surgeon and mathematician, of Syrian origin, named Abu-Al-Farag Muaffaq Al-Din Yaquob ibn Ishaq, known as Ibn-Al-Quff. He was born in the city of Damascus, his father was a learned man in history, Arabic language, literature and in writing, and worked as a clerk by the service of King Al-Naser Yusuf ibn Mohammad in Sarkhad. One of the closest friends of his father was the famous physician Ibn Abi Usaibia (who wrote his famous book "The Classes of Medical Men"), who became the instructor of Ibn Al-Quff and taught him medicine.

Ibn Al-Quff was a brilliant boy and read many medical books of the famous ancient physicians such as Euclids, Hippocrates, Hunayn, Rhazes. Later on, he went with his father to Damascus, where he studied medicine and philosophy. Soon, he served as a physician in the citadel of Damascus after he had spent

several years in the citadel of Agloon. He excelled in medicine as well as in Surgery. He wrote several books, of which was "Al-Oumdah" (The Authority on Surgery) in which he copied much from the famous book on Surgery of Abulcassis (Al-Zahrawy). Another book was "Al-Shafi" (The Healer on medicine).

In the book "The Authority on Surgery", Ibn Al-Quff has devoted a special chapter on the preparation of ethereal oils which was commonly known during those past days by the name Al-Duhoun. He has described about 34 different oils together with their medical action.

1. Oil of Violet: Flowers of violet are put in a bottle filled with light sesame oil, then hung in hot sun-light for 40 days, then kept in shade afterwards and used.

Uses: as a sedative and soporific.

2. Oil of Gourd: Gourd is peeled, pounded, pressed then four parts of the juice is added to one part of light sesame oil, cooked on light fire till all of the water

* Pharmacist, Researcher in History of Medicine & Pharmacy, P.O. No. 136, Maadi, Cairo, Egypt.

evaporated, thus leaving oil behind.

Uses: Analgesic for headaches and soporific. Sometimes, if mixed with wax, it becomes useful for burns and scalds.

3. Oil of Nelopher (or Nenuphar which is the great white water-lily): Immerse the flowers in light sesame oil, hung in hot sun's rays for 40 days, then used.

Uses: Powerful sedative and soporific, more analgesic, good for meningitis.

4. Oil of Almonds: Peel the almonds, dry the fruits, grind finely until it becomes thick (i.e. like dregs of sesame oil), then sprinkle hot water upon it, and beat it till the oil separates.

Uses: against sprains, headaches, hot swellings, renal ache, dysuria, chronic cough, asthma and pneumonia. (Almonds are *Prunus amygdalus* var. *dulcis*).

5. Oil of Almond and Violet: Peel the almonds, leave them to dry for three days. Get a sieve and place violet flowers over it, then put the almonds over it, make three layers as such, then cover the last layer with condiments. Leave it for 12 hours over light fire, then at night, replace the violets with other fresh ones and keep them over light fire. Repeat that for 10 times, then grind more almonds and proceed as stated before.

Uses: Acts as a soporific if used as a snuff or inhaled. Good for severe headaches, meningitis, insomnia and against tumours.

6. Oil of Roses: Petals of white roses are collected at the end of the season, put them in a glass vessel filled with oil expressed from unripe olives, then leave

it exposed to direct sunlight for 40 days.

Uses: Analgesic, good for headache, weakness, sprains, lacerations and fractures.

7. Oil of Bitter Almonds: Peel the almonds, dry the fruits, grind finely until it becomes thick, then sprinkle hot water over it, and beat it till the oil separates.

Uses: used in the form of eardrops, while if taken internally dissolves urinary calculi. Also taken with the roots of *Iris florentina* against colitis.

8. Oil of Walnuts: Peel the walnut fruits, then dry them and grind them finely until it becomes thick, then sprinkle hot water over it, and beat it till the oil separates.

Uses: Against pruritis and fistula.

9. Castor oil: Peel the castor fruits, dry them, grind finely till it becomes thick, then sprinkle hot water over it, and beat it till the oil separates.

Uses: As an ingredient in cosmetics and as anthelmintic.

10. Oil of Ladanum and Myrtle: Cook one libra of myrtle oil together with two ounces of Ladanum in a double vessel (Mary's path) until Ladanum melts and mixes with the oil.

Uses: Heals up ulcers, as a hair tonic and blackens the hair.

11. Ointment that blackens the hair, strengthens it and heals up weeping ulcers: Mix equal parts of Emblic (myrobalan), Myrtle leaves, bark of pine, and add water to them, cook well, knead then filter. To the filtrate add an equal amount of sesame oil, and cook on light fire.

12. Oil of Worm-wood: Pound equal parts of worm-wood, Laurel seeds (*Laurus*

nobilis), Ladanum (*Cistus Ladaniferus*) very finely, put the powder in a cloth, soak in oil of Myrtle (*Myrtus communis*). Leave it for sometime, then use.

Uses: Tonic for limbs and hair.

13. Oil of Crocus: (*Khaluqi ointment*). Crocus Sativus 6 drachms, *Calamus aromaticus* 5 Drachms, Cardamon (*Elettaria cardamomum*) 6 drachms, Myrrh (*Commiphora myrrha*) 1/2 drachms. Soak in water crocus and calamus for five days, while soak in vinegar the Cardamon and Myrrh for five days.

Mix all together, add oil of unripe olives one drachm, cook on light fire till all the water evaporates, then use the oil.

Uses: Nerve sedative, relaxes contractions.

14. Oil of Iris florentina: Put thirty flowers of Iris in a vessel, and 1/2 lb. of sesame oil, hang them in direct sunlight for 40 days then use.

Another kind of the oil: Thirty flowers of Iris are mixed with Cassia bark and Costus, each 10 drachms, with Balsamodendron seeds, Mastic, Crocus, Cloves and cinnamon ... each 5 drachms. Hang them in sunlight for 40 days, then use.

Uses: Relaxing, as a dressing for head ulcers, antidote for hyoscyamus and mushroom poisoning.

15. Oil of Laurel: Seeds of Laurel are boiled well in water, then old oil of unripe olives is added, cook till water evaporates and oil only remains.

Uses: for alopecia and tinnitus.

16. Oil of Jasmin: Flowers of Jasmin are put in a glass vessel, add to it oil of

unripe olives till completely filled. Expose the vessel to sun-light for 40 days then use.

Uses: Relaxant.

17. Oil of Narcissus: Flowers of Narcissus are put in a glass vessel, add to it oil of unripe olives till completely filled. Expose the vessel to sun-light for 40 days then use.

Uses: Relaxant.

18. Oil of Chamomile: Flowers of Chamomile are put in a glass vessel, add to it oil of unripe olives till completely filled. Expose the vessel to sun-light for 40 days, then use.

Uses: Sedative and carminative.

19. Oil of Andropogon (Sweet rush): Grind the roots, then sprinkle hot water over it, beat till the oil separates.

Uses: Against pruritis, scabies, vitiligo and also sedative.

20. Oil of Lemon: Cut ripe lemon rind into slices, press the peel and the oil is squeezed out.

Uses: Makes hair regrows, nerve tonic, good for renal and vesical pains when used locally.

21. Oil of Dill: Immerse dill seeds in oil of unripe olives, expose it to sun-light for 40 days, then use.

Uses: Carminative, antimeteorism, anti-rheumatic, antipyretic.

22. Oil of Absinth: One ounce of blossoms of absinth is soaked in oil of unripe olives, exposed to sun-light for 40 days, then use.

Uses: Antimeteorism, antirheumatic.

23. Oil of Dill (Leaves): Cook 4 ounces of Dill leaves with 4.5 lbs. of oil of olives

and 2 lbs water till all the water evaporates, hang in direct sunlight, then use.

Uses : Local rubificent over the kidney and bladder, Carminative.

24. Oil of Aspalat : Pulverize 6 ounces of Aspalat, 6 ounces Cassia bark, 4 ounces cassia branches, 4 ounces costus, 5 ounces cinnamon, 2 ounces *Calamus aromaticus*. Then add 9.5 lbs. unripe olive oil, hang in direct sun-light for 40 days, use.

Uses : Stomachic and antirheumatic.

Similarly, other oils could be prepared in the same manner such as:

25. The Shining Oil:

- | | |
|---------------------------------|---|
| 26. Sweet Marjoram Oil | : Obtained from <i>Majorana hortensis</i> . |
| 27. Cassia Bark oil | : Obtained from <i>Cinnamomum cassia</i> . |
| 28. Mastic Oil | : Obtained from <i>Pistacia lentiscus</i> . |
| 29. Indian Spikenard Oil | : Obtained from <i>Andropogon nardus</i> . |
| 30. Linseed oil | : Obtained from <i>Linum usitatissimum</i> . |
| 31. Henna Oil | : Obtained from <i>Lawsonia inermis</i> . |
| 32. Balsamodendron Oil | : Obtained from <i>Commiphora opobalsamum</i>
(<i>Balsamodendron gileadensis</i>). |
| 33. Coca Oil | : Obtained from <i>Lodoicea allipyge</i> . |
| 34. Caltrop oil | : Obtained from <i>Tribulus terrestris</i> . |

INDEX OF MEDICINAL PLANTS

- | | |
|--------------------|--|
| 1. Violet | : <i>Viola odorata</i> |
| 2. Gourd | : <i>Cucurbita pepo</i> var. <i>typica</i> . |
| 3. Nelopher | : Water-lilly: Nenufar: <i>Nymphaea alba</i> . |
| 4. Almonds (Sweet) | : <i>Prunus amygdalus</i> var. <i>dulcis</i> . |
| 5. Roses | : <i>Rosa alba</i> . |
| 6. Almonds(bitter) | : <i>Prunus amygdalus</i> var. <i>amara</i> . |
| 7. Walnuts | : <i>Juglans regia</i> |
| 8. Castor | : <i>Ricinus communis</i> |
| 9. Emblic | : <i>Phyllanthus emblica</i> |
| 10. Myrtle | : <i>Myrtus communis</i> |
| 11. Pine | : <i>Pinus Sylvestris</i> |
| 12. Ladanum | : <i>Cistus ladaniferus</i> |

- | | |
|-----------------------------|---|
| 13. Worm-wood | : <i>Artemisia absinthium</i> (Absinth) |
| 14. Laurel | : <i>Laurus nobilis</i> |
| 15. Crocus | : <i>Crocus sativus</i> |
| 16. Calamus | : <i>Calamus aromaticus</i> |
| 17. Cardamon | : <i>Elettaria cardamomum</i> |
| 18. Myrrh | : <i>Commiphora myrrha</i> |
| 19. Iris | : <i>Iris florentina</i> |
| 20. Cassia | : <i>Cinnamomum cassia</i> |
| 21. Costus | : <i>Costus speciosus</i> |
| 22. Balsamodendron | : <i>Commiphora opobalsamum</i> (or <i>Balsamodendron gileadensis</i>) |
| 23. Mastic | : <i>Pistacia lentiscus</i> |
| 24. Clove | : <i>Eugenia aromatica</i> |
| 25. Cinnamon | : <i>Cinnamomum zeylanicum</i> |
| 26. Jasmin | : <i>Jasminum sambac</i> . |
| 27. Narcissus | : <i>Narcissus poeticus</i> |
| 28. Chamomile | : <i>Matricaria chamomilla</i> |
| 29. Andropogon (Sweet rush) | : <i>Andropogon schoenanthus</i> |
| 30. Lemon | : <i>Citrus medica</i> var. <i>limonium</i> |
| 31. Dill | : <i>Anethum graveolens</i> |
| 32. Aspalat | : <i>Calycotome spinosa</i> |
| 33. Sweet Marjoram | : <i>Majorana hortensis</i> |
| 34. Indian Spikenard | : <i>Andropogon nardus</i> or <i>Cymbopogon nardus</i> |
| 35. Linseed | : <i>Linum usitatissimum</i> |
| 36. Henna | : <i>Lawsonia inermis</i> (or <i>L. alba</i>) |
| 37. Cocoa | : <i>Lodoicea allipyge</i> |
| 38. Caltrop | : <i>Tribulus terrestris</i> |
| 39. Olive oil | : |
| 40. Sesame oil | : |

सारांश

इब्न अल-खुप्फ (13 वीं शती ईसवीं) द्वारा ईथरीय तैलों (अल-धुवों) की तैय्यारी

– समीर याह्याअल गम्माल

इब्न अल-खुप्फ दमिष्क में पैदा हुआ था । इसने चिकित्सा शास्त्र की शिक्षा इब्न अबी उसैबिया से प्राप्त की एवं चिकित्सा विज्ञान पर अनेक पुस्तकें लिखा जिनमें से इसकी एक पुस्तक “अल-उमदाह’ (शल्य चिकित्सा पर प्रमाणिक कार्य) में ईथरीय तैलों की तैय्यारी पर एक विशिष्ट अध्ययन दिया गया है जो कि उन दिनों सामान्यतया अल-धूवों के नाम से जाना जाता था । इस विषय के अन्तर्गत उसने लगभग 34 विभिन्न तैलों का उनके चिकित्सापरक गुण-धर्मों के साथ उल्लेख किया है ।