



Review Article
Volume 9 Issue 2 - July 2017
DOI: 10.19080/ARTOAJ.2017.09.555758

Agri Res & Tech: Open Access J Copyright © All rights are reserved by Dragan Jovanov

# Application of Medicinal Aromatic and Spice Plants Zingiber officinale, Mentha piperita, Rubus fructicosus, Malva silvestris, Fragaria vesca, Sambucus nigra, Cornus mascula, Taraxacum officinale, Erythraea centaurium and their Phytotherapeutic Action to Protect against Colon Cancer

### **Dragan Jovanov\***

MIT University in Skopje, Macedonia

Submission: April 24, 2017; Published: July 31, 2017

\*Corresponding author: Dragan Jovanov, MIT University in Skopje, Macedonia, Email: daci.j@hotmail.com

#### Abstract

There are plants that release a special aroma or scent that feels and without touch. But surely you've noticed that certain plants emit a scent when you touch it, others will not miss the smell until you rub them all over your hands. In all smell due to essences containing in its tissues. About 600 years ago, Europeans began the adventure to cross oceans in search of herbal products that improve the taste of foods such as a zingiber officinale, cloves or cinnamon. It called spices. In those times there were spices were more appreciated and since gold, traders kept secret locations from which they originated. Later they came to be grown in large quantities and have ceased to be exotic products.

Keywords: Aromatic plants; Spice plants; Exotic products; Essences; Herbal products

#### Introduction

In all smell due to essences containing in its tissues. They essences and aromatic oils are chemical substances soluble in alcohols or oils, which can be distinguished from plants and be used to produce natural lotions, colognes, perfumes and flavors. In aromatic flowers to name a few in those include thyme, mint, lavender, forest perifolija, chadoresti plants (Except hemlock, it is poisonous plant, although it is used as a medicine because anestetichkoto effect). There are aromatic plants whose flowers have a unique smell only present in the flower as the rose, jasmine and violets and citrus. Aromatic essence is found only in curing the fruit, which means to be picked green and then controlled to dry. Vanilla is very used in confectioner, the production of chocolate, as in the production of cognac and rum. But today, unfortunately, much of the vanilla and many other aromatic substances used, are produced artificial. According

to the latest research aromatic herbs have a good effect on the body in the fight against cancer. Spicy herbs are commonly used in households, but we do not know what about their healing powers. According to previous researches, it has been proved that many spicy herbs are using to treat cancer.

# Application of Medicinal Aromatic and Spice Plants and Their Phytotherapeutic action Effect

#### Sambucus nigra

For a cure are used flowers, bark, fruit, leaf and root. Tea leaves elder is used for stimulating the secretion of urine, against the accumulated fluid in the body, to treat diabetes, as well as purification and improving blood. Tea color elder is using to treat colds, bronchitis, cough, flu, initially pneumonia, severe sneezing, cleansing of the colon, wheezing, asthma, in the initial

# Agricultural Research & Technology: Open Access Journal

tuberculosis and in all rheumatic diseases. While preparing the tea, is using a teaspoon per a cup of tea. During the day it should be drunk only a small cup or maximum two, in large periods, sip by sip. It would also remove the difficulties in urinating, obstacles in the functioning of the kidneys and bladder, against dropsy, rheumatism of the muscles and joints and more. This tea also is very effective against constipation.

#### Cornus mascula

It is grown in gardens and parks because of the beautiful yellow flowers and delicious fruits. Tannins and pektinskite substances have a beneficial effect on the lining of the bowel, making juice, jam, tea, and other products prepared from mature cornels given as a very pleasant cure to treat diarrhea and other diseases of the digestive organs. Similar effects have bark, and especially jam juice mature cornels falling in embarrassing nutrients while they are medication that everyone is using with pleasure. It is quite unfortunate that in our country cornels are not many used. According to the most recent research drain in combination with other medicinal plants is a great fighter in the fight against cancer.

#### Taraxacum officinale

When treating with dandelion comes to enhance the secretion of bile, acts as a diuretic, stimulates the kidneys, purifies the kidneys, purifies the blood, cleans the intestines, it helps with bone pain and rheumatism, against skin eczema, ulcers and lack of appetite. It affects all secretion in the body, helps with constipation, with interference from accumulated mucus affects the lung secretion of urine from the body removes substances that contribute to fatigue in the body and root him recover the body. Root and stem contain a bitter substance called TRAKSACIN, acting diuretic, but can cause diarrhea and obstacles in heart rate. However, the visible signs of poisoning appear after the plant parts will be consumed in large quantities, especially the older parts of bitter dandelion. The young leaves are quite harmless. Dandelion tea is prepared from crushed dried root. This tea purifies the body, helps with degeneration of cartilage and stimulate and perspiration. According to recent research has come to the realization that dandelion is good in the fight against cancer, in combination with other medicinal plants.

## Ginger (Zingiber officinale)

Zingiber officinale is a medicinal plant which can relieve pain, relieves inflammation, spasms and has tonic effect. Boosts sexual potency. Ginger extract reduces blood pressure, increases the elasticity of the uterus, acting mesmerizing. Ginger tea prevents vomiting during pregnancy. It works pretty well against fungal infections. Enhances memory, compensated for the power to heal the stomach and liver and is applied against paralysis, jaundice, disturbances in urination, cold and weakness of urinary organs, removing the harmful effects of animal toxins from joint pain, against the tumor.

To improve digestion, the pulmonary-bronchial diseases, bronchial asthma, chronic bronchitis, sleep disturbance, tinnitus,

with headaches, stroke, paralysis, loss of speech, diseases of the central nervous system as a means of detoxification in severe therapies to reduce the toxic effects of hemoterapevskite means, for example, in oncology diseases, tuberculosis, lung cancer, epilepsy, in cardiology, in the treatment of those suffering from pneumonia, the major forms of chronic hepatitis, in impotence, chronic arthritis. The compress of ginger used in tumors caused by lymph. Ginger is a magical means of rejuvenation, enhances intelligence and sleep, people can sleep a little, but deeply. Stimulates the decomposition of fats, preventing their creation. It increases the activity of the thyroid gland. According to the most recent studies, ginger is a great fighter against cancer.

#### Mentha piperita

Tea leaves of mint increases the secretion of the glands that participate in digestion, increases appetite, stimulates the secretion of bile and removes spasms of smooth muscles of the intestines, gall bladder and urinary tract. Mint successfully used against worms, removes pain serves as a means of coughing and to encourage menstruation. Also, mint reduces the secretion of milk, and if consumed in large quantities, then leads to sleep disturbance. The main active substance of mint is menthol. If is applied to the mucous membrane or if rubbed into the skin, menthol irritates nerve endings and causes a feeling of coldness. Mint leaves are recommended in nervous excitement, the tea is using for rinsing the mouth inflammation of the gums. Preparations of mint are components of many medicines: validol, nitroglycerin drops teeth and elixirs.

Drinking mint tea or mint oil accelerates healing from sexual diseases. Mint tea or essential oil bath is recommended for children suffering from mumps and rickets. Mint is used as a pleasant, mild and harmless remedy for soothing, anti-gas, purifying and soothing irritable bowel, inflation and cramps against difficulties in digesting food in the body, and a member of the teas for the secretion of bile. Note: Mint should not be used in large amounts because large amounts could stimulate bronchospasm, respiratory problems and pain in the heart.

#### Malva silvestris

Black Marshmallow is using to remove the barriers to digestion in the body. As the white mallow so black mallow is used in the form of tea and only the flower or within the so-called lung teas to relieve cough. The tea is used for treating catarrh, bronchi, hoarseness, inflammation of the oral cavity, lung inflation. It is recommended as a means to treat stomach and intestinal cramps, purify the colon and against urination, which is followed by pain. Dried flowers of black mallow must be kept in a dry place, because, otherwise, it will fade.

#### Rubus fructicosus

Vitamins, minerals, fiber, flavonoids, all contain blackberries, which are not only delicious but PISC its ingredients have a beneficial effect on many health problems. Apart from the fruit of the bush, which is used to make juices, marmalade, wine, in cakes and leaf bush can be used for tea this tea helps to lower

blood pressure and helps with periodontitis. Health benefits of the bush: Like other shrubby mulberries and blackberries are packed with many nutrients, such as vitamins, minerals, antioxidants and fiber, which are necessary to maintain health. Blackberries have very low caloric value. It's absorbed more slowly than regular sugar and no shouts level of blood sugar.

Blackberries contain fairly high amounts of phenolic flavonoid phyto-chemicals, such as anthocyanins, Gallic acid, cyanidins, Pelargonidin, catechin, kaempferol and salicylic acid. Scientific studies have shown that these antioxidant compounds can have a positive impact on health in the fight against cancer, aging, inflammation and the development of neurological diseases. Fresh blueberries are an excellent source of vitamin C (providing 35 percent of the daily recommended dose of 100 grams), which is a powerful natural antioxidant.

#### Fragaria vesca

Wild strawberry contains sodium, calcium, iron, phosphorus, fragarin, gallotannin, pentozin little essential oil, sugar, salicylic, citric and tartaric acid, and vitamin C. Preparation and Uses: The fruit of wild strawberry improves blood is used against sclerosis of blood vessels and increased blood pressure, prevent blood clotting and stickiness of blood. Therefore it is recommended to eat more fruit strawberry fresh, maybe in the form of preserves or jam. For the following diseases: cleaning the sand from kidney and gall, strengthen the heart, treat jaundice. Treat asthma, bronchitis treatment, rinsing piles for calming the nerves.

#### Erythraea centaurium

The name of this plant comes from the Latin word centum hundred and aurum - gold, meaning light that is worth a hundred gold coins. Used in the phytomedicine primarily as a good tonic, and stomahik amarum similar to lincurata. Usage: Enters within the biter teas intended for the digestive tract, creating appetite against interference with digestion, flatulence and bloating. This action is due to bitter heterosides present in the whole plant, of which the most abundant is gencipikrozidot and alkaloids, including chief is gentianine. The greatest concentration of these substances is in the trunk, less color and at least leaves (Table 1).

**Table 1:** Do you use/have used *Zingiber officinale, Mentha piperita, Rubus fructicosus, Malva silvestris, Fragaria vesca, Sambucus nigra, Cornus mascula, Taraxacum officinale, Erythraea centaurium* in the treatment of colon cancer?

	Yes	No	Partially
Man	46	5	16
Women	63	1	19
%	72,7%	4%	23, 3 %

From the above results obtained, we can see that in 72.7% of cases in the treatment of colon cancer, *Zingiber officinale, Mentha piperita, Rubus fructicosus, Malva silvestris, Fragaria vesca,* 

Sambucus nigra, Cornus mascula, Taraxacum officinale, Erythraea centaurium used as adjuvant treatment. 23.3% of respondents said they partially use these medicinal plants in addition to the treatment of colon cancer. A very small percentage, only 4% of respondents said they never used Zingiber officinale, Mentha piperita, Rubus fructicosus, Malva silvestris, Fragaria vesca, Sambucus nigra, Cornus mascula, Taraxacum officinale, Erythraea centaurium. Women used more Zingiber officinale, Mentha piperita, Rubus fructicosus, Malva silvestris, Fragaria vesca, Sambucus nigra, Cornus mascula, Taraxacum officinale, Erythraea centaurium addition in the treatment of colon cancer, compared to men. Also, the data is matched with the partial use of these medicinal plants.

In terms of the age of respondents 40 to 60 years mostly used Zingiber officinale, Mentha piperita, Rubus fructicosus, Malva silvestris, Fragaria vesca, Sambucus nigra, Cornus mascula, Taraxacum officinale, Erythraea centaurium addition in the treatment of colon cancer. They are followed by persons aged 20 to 40 years, also used these herbs in colon cancer. In this category of respondents partial use of these medicinal plants in addition to the treatment of colon cancer, was the highest rate. According to the results none of the respondents over 60 years of age are not used Zingiber officinale, Mentha piperita, Rubus fructicosus, Malva silvestris, Fragaria vesca, Sambucus nigra, Cornus mascula, Taraxacum officinale, Erythraea centaurium. The same statistics also appears in people up to 20 years, with most of them used these herbs, but there are people who partially or not at all used Zingiber officinale, Mentha piperita, Rubus fructicosus, Malva silvestris, Fragaria vesca, Sambucus nigra, Cornus mascula, Taraxacum officinale, Erythraea centaurium (Table 2 & 3).

Table 2:

	Yes	No	Partially
To 20 year	16	1	5
From 20 to 40 years	28	3	14
From 40 to 60 years	45	2	9
Over 60 years	20	0	7
%	72,7%	4%	23, 3 %

**Table 3:** Does the proper use of *Zingiber officinale, Mentha piperita, Rubus fructicosus, Malva silvestris, Fragaria vesca, Sambucus nigra, Cornus mascula, Taraxacum officinale, Erythraea centaurium* have achieved the expected results?

	Yes	No	Partially
Man	46	6	15
Women	61	6	16
%	71, 3 %	8%	20,7%

# Agricultural Research & Technology: Open Access Journal

Of the total number of respondents, we find that with proper use of Zingiber officinale, Mentha piperita, Rubus fructicosus, Malva silvestris, Fragaria vesca, Sambucus nigra, Cornus mascula, Taraxacum officinale, Erythraea centaurium, 71,3 persons have achieved the expected results. Whereas 20.7% of respondents partly achieved the expected results in the proper use of Zingiber officinale, Mentha piperita, Rubus fructicosus, Malva silvestris, Fragaria vesca, Sambucus nigra, Cornus mascula, Taraxacum officinale, Erythraea centaurium in order to improve health conditions in colon hose.

On the classification of respondents male and female, in this matter in both sexes in the proper use of Zingiber officinale, Mentha piperita, Rubus fructicosus, Malva silvestris, Fragaria vesca, Sambucus nigra, Cornus mascula, Taraxacum officinale, Erythraea centaurium. They have achieved the expected results. And while in both cases also, there are volunteers with proper use showed a partial effect or no effect.

In the classification of respondents by age, we can conclude that among those 40 to 60 years reported that they had achieved positive results with these medicinal plants. Among subjects 20 to 40 years has the highest number of persons who reported that they had achieved partial results in the proper use of *Zingiber officinale, Mentha piperita, Rubus fructicosus, Malva silvestris, Fragaria vesca, Sambucus nigra, Cornus mascula, Taraxacum officinale, Erythraea centaurium,* despite most of them who said they fully achieved the expected results. Most people over 60 years have achieved the expected results, but some of them answered partly not. Whereas, among those 20 years and over 60 years in common is that the same number of respondents reported that they have achieved the expected results in the proper use of these medicinal plants (Table 4 & 5).

Table 4:

	Yes	No	Partially
To 20 year	15	1	6
From 20 to 40 years	28	4	13
From 40 to 60 years	42	6	8
Over 60 years	22	1	4
%	71,3%	8%	20,7 %

**Table 5:** Use of any herbal preparations or herbal medicines acquainted themselves with their action, the reason for the application, correct dosage and use, contraindications and side effects?

	Yes	No	Partially
Man	25	16	26
Women	33	25	25
%	38, 7 %	27,3%	34%

38.7% of respondents surveyed the use of herbal preparations and herbal remedies in detail informed of their action, the reasons for the application, correct dosage and use. 34% partially informed, while 27 percent of respondents 3 person say that they are thoroughly familiar with the side effects. In women the number of informed and the number of those who are partially informed of the same. Of the total number of male respondents is roughly the same number of partially informed and knowledgeable persons. 20 years old respondents and over 60 years old have the same number of ignorance in this matter. Persons 4 between 0 to 60 years have the highest rate of awareness on the effects, reasons for applying, correct dosage and use of herbal products and herbal medicines and their side effects and contraindications (Table 6) [1-7].

#### Conclusion

Through the research of this paper, we came to the conclusion that the medicinal and aromatic plants, rather apply for care and treatment of cancer with particular reference to cancer of the colon. Most of the respondents knew the medicinal plants their healing powers, composition and properties. This paper further will be part of a many of studies that will contribute large benefit to health.

#### References

- Jovanov D (2013) Atlas of medicinal plants in the Republic of Macedonia.
- 2. Jovanov D (2013) Natural medicinal aromatic and spice plants, use and their application for improving the health condition of man.
- 3. Jovanov D (2013) Treatment with natural medicinal herbs (herbal recipes).
- 4. Jovanov D (2013) Medicinal aromatic plants.
- 5. Jovanov D, Jovanova M (2013) Medicinal spice plants.
- 6. Jovanov D (2014) Macedonian Strong Medicine. Skopje, Macedonia.
- 7. Jovanov D (2014) Natural Doctor, Skopje, Macedonia.

# Agricultural Research & Technology: Open Access Journal



This work is licensed under Creative Commons Attribution 4.0 License

DOI: 10.19080/ARTOAJ.2017.09.555758

# Your next submission with Juniper Publishers will reach you the below assets

- Quality Editorial service
- · Swift Peer Review
- · Reprints availability
- E-prints Service
- Manuscript Podcast for convenient understanding
- Global attainment for your research
- Manuscript accessibility in different formats

#### ( Pdf, E-pub, Full Text, Audio)

• Unceasing customer service

Track the below URL for one-step submission https://juniperpublishers.com/online-submission.php