

Aonla (Amla) – A Fruit of 21st Century

Vishal Vijayvargiya

Ph.D Research Scholar, Department of Horticulture
(Fruit Science), LPU Phagwara, Punjab

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Abstract

Aonla (*Emblica officinalis*), commonly called Indian gooseberry, belonging to family Euphorbiaceae, is one of the oldest known indigenous fruit tree species with wide distribution, reflecting its adaptation to wide range of edaphoclimatic conditions. It is an important fruit owing to its nutritional, therapeutical, and postharvest and industrial value.

Introduction

According to Ayurveda, Amla is a fruit that has countless benefits. Amla is not only beneficial for the skin and hair, but also acts as a medicine for many diseases. Amla is used in many ways, such as amla juice, amla powder, amla pickle, etc. Amla is rich in vitamins, minerals, and nutrients, which make amla with priceless qualities. Aonla, a small-sized simple fruit, is a mine of medicinal properties. This is the reason why it is used as a home remedy for many physical problems. At the same time, in Ayurveda, it is used as a medicine to relieve some serious problems. Aonla is called Amritphal or Dhatriphal in Ayurveda. Amla (*Phyllanthus emblica*) is being used as a medicine since the Vedic period.

The medicine that is made from the plant and plant is called wood medicine and the medicine made from metal and mineral is called Rasaushadhi. Amla is used in both these types of medicine. Even Amla is considered to be the best of the chemicals, that is to say, when the hair becomes lifeless and dry-dry then using Amla brings a new life to the hair. Dry hair starts appearing black, thick and shiny after applying amla paste. Aonla is mentioned in Charaka Samhita for medicines for increasing age, reducing fever, curing cough and eliminating leprosy. Similarly, in the Sushruta Samhita, Amla has been described as a sub-partisan medicine, which means that Amla is the medicine that helps in removing the faults of the body through feces. Indian gooseberry is used for digestive diseases and jaundice.



Botany and Morphology –

- ❖ Aonla belongs family Euphorbiaceae and scientifically is *Emblica officinalis* (formerly known as *phyllanthus emblica*).
- ❖ The genus includes a large number of sp. and other edible ones are *phylenthus acidus* (star gooseberry or otaheite gooseberry) and *p. longiforus*.
- ❖ The chromosome number is aonla in $2n=28$ and wide variation from $2n=98$ to 104 is reported.
- ❖ The tree is small to medium in size 8-18m .it has a crooked trunk and spreading branches.
- ❖ The plant exhibit phyllanthoid branching habit producing short determinate shoots.
- ❖ Unisexual flowers are produced as axillary cymules on determinate shoots.
- ❖ Fruits are drupaceous and capsular with fleshy exocarp.
- ❖ Fruits are sour and astringent and not consumed as a table fruit.
- ❖ The branchlets are glabrous or finely pubescent 10-20cm long, usually deciduous.
- ❖ The flowers are greenish yellow.

Floral Biology-

- ❖ Flowers unisexual pale green, 4 to 5 mm in length, borne in leaf axils in clusters of 6 to 10.
- ❖ Staminate flowers tubular at the base having a very small talk, gamosepalous having 6 lobes at the top, stamens 1 to 3, polyandrous, filaments 2mm long.
- ❖ Pistillate flowers having a gamopetalous corolla and two branched style.

- ❖ Bearing behaviour both staminate and pistillate flowers are borne on the same branch but the staminate flowers occurs towards the spices of small branches.
- ❖ Female flowers take about 72 hours to open fully .pedical is very short.
- ❖ The new shoot emerge out during first week of April .the flowering period varied different varieties from 17-24 days .flowering period twice in hear February-march and June -july.
- ❖ The percentage of female flowers varies from 1.12 to 8.33 depending upon varieties.
- ❖ According to Dhar (1979) the ratio of female and male flowers may very from 1:501 depending upon the cultivars.

Varieties

Variety	Breeding method	Specific features
Banarasi		
NA-5 (Krishna)	Seedling selection from Banarasi	Big fruited variety
NA-9	Seedling selection from Banarasi	Suitable for preserve and candy making
Francis (Hathi jhool)		Highly susceptible to necrosis
NA-7 (Neelum)	Seedling selection from Francis	Ideal fpr commercial cultivation.

Physiological disorder-

- Internal necrosis – Browning of mesocarp and endocarp.

Pest and disease

- ✓ Rust (*Ravenelia emblica*) – Major disease of Aonla
- ✓ Bark eating caterpillar (*Inderbala tetraonis*) – Major pest of Aonla

Health Benefits -

1. Helpful in weight loss -

Amla can prove to be beneficial for people struggling with obesity. Actually, according to the National Center for Biotechnology Information, a research done on amla confirms this. In this research done on rats, it is believed that gooseberry has antiobesity,



which relieves the problem of obesity . Based on this fact, it can be assumed that the use of amla can be relieved to some extent from the problem of obesity. However, apart from this, the patient needs to take special care of regular exercise and balanced diet, so that the patient can get the benefits of amla positively in this problem.

2. Beneficial for heart health -

It can also be considered beneficial to use amla to reduce cardiovascular risks and maintain heart health. In this regard, a research was conducted on Indian gooseberry by the Indian Journal of Pharmacology. Research has found that the intake of amla can help in reducing the increased lipids as well as reducing the increased blood pressure. These are both risk factors related to the heart, so it can be said that the medicinal properties of amla can play an important role in maintaining heart health. At the moment, further research is needed in this regard to understand the effect of Amla on heart health more deeply.

3. Control diabetes / blood sugar -

People suffering from diabetes can also get relief in this problem by using Amla. This is evidenced by a research conducted by the Research Development Cell of Father Mueller Medical College, Karnataka. In this research, it was found that gooseberries contain special ingredients called Gallic Acid, Gallotanin, Ellagic Acid and Corilagin. All these elements exhibit antioxidant (free radical destroying effect) effect. At the same time, the research also believed that due to this antioxidant effect, these elements also exhibit antidiabetic effect, which can help in controlling increased blood sugar . On this basis, it would not be wrong to say that the benefits of eating amla can prove to be helpful to some extent even in the problem of diabetes.

4. Avoid cancer -

Due to the medicinal properties of amla, the consumption of Amla can also prove to be beneficial for prevention and prevention of fatal diseases like cancer. In fact, a research conducted on Amla by Father Mueller Medical College, Karnataka, found that this fruit has chemopreventive effects, which can be helpful in preventing cancer. Also, research suggests that some phytochemicals (gallic acid, aalic acid, pyrogallo, norsequiterpenoid, corilagin,

geranin, elocarpusin, and prodelphinidin B1 and B2) present in the gooseberry have antianoplastic (cancer cell destroying) effects. is. Due to the presence of these elements, the consumption of amla can help to reduce the risks of cancer to some extent . However, more research is still needed on how effective the benefits of eating amla are against cancer. Along with this, it is also important to keep in mind that cancer is a fatal and fatal disease. Therefore, for the treatment of this disease, medical treatment is more important than home remedies.

5. Relief in problems related to urinary system -

The problem of not having urination can happen to anyone, child or woman, but in general this problem is more common in elderly men. The reason is that in old age, the prostate gland (semen making gland) of elderly men gets inflamed . In such a situation, consumption of Amla can prove to be a better option to get relief from this problem. According to experts, Ayurveda includes many fruits, flowers or herbs that have diuretic (diuretic) properties. These include the name of Amla (6). Therefore, it can be said that the benefits of Amla or Amla juice can prove to be helpful to some extent in the problem of non-urination.

6. Aids in digestion -

The benefits of amla juice can also be considered effective in improving the digestive process. Actually, a research done on Amla related to cancer has found that it has Stomachic (Stomachic - improves digestion and promotes appetite) properties. At the same time, in this research it was also believed that amla is also helpful in improving the problem of stomach ulcers and indigestion. It also has the ability to relieve stomach gas problems . Given these facts, it would not be wrong to say that using amla can help in strengthening digestive health.

7. Increase immunity -

The benefits of eating amla include improving the body's immunity. Indeed, according to the Journal of Pharmacognosy and Phytochemistry, Amla has the ability to increase both energy and immunity. Therefore, it is also called disease-resistant tonic . On the other hand, a research conducted on amla suggests that the antioxidant properties present in

amla can improve immunity by reducing the effect of free radicals . On this basis, it would not be wrong to say that amla can prove to be helpful in increasing the immunity of the body. However, more research is still needed on how it works on the body to improve immunity.

8. Strengthen bones –

According to experts, amla has antiinflammatory (inflammation-reducing) properties. This property can help in reducing the inflammation of joints in arthritis. At the same time, it also contains abundant vitamin C . Vitamin C is considered important for bone strength . On this basis, we can say that Amla can prove to be helpful in strengthening bones somewhere. However, there is no clear evidence on how helpful the benefits of eating amla are for the growth and strengthening of bones.

9. Increase eyesight

A research in the Journal of Pharmacognosy and Phytochemistry suggests that consuming amla can help with conjunctivitis and glaucoma eye disorders. Tell that in conjunctivitis, the white part of the eye is swollen and in glaucoma, the patient's eyesight becomes weak. Along with this, amla can also be helpful in relieving excessive pressure on the nerves of the eyes . For this, mixing honey in Amla juice is recommended to be taken twice a day. However, it is not clear what ingredients are present in amla, which are beneficial for the eyes.

10. For gallstones -

The benefits of drinking Amla and Amla juice can also be achieved in the problem of gallstones. Indeed, this is mentioned in a research conducted by the Asian Pacific Journal of Tropical Diseases. Research has suggested that the powder of gooseberry seeds in gall, kidney and bladder stones can help reduce the irritation caused by stones in urination . At present, there is no clear evidence of whether the gooseberry is effective in preventing the formation of gallstones.

11. Keep the liver healthy -

Aonla's properties can also prove to be helpful in keeping the liver healthy. Irregular and improper eating is seen to have adverse effects on the liver, which increases the risk of liver related risk. At the same time, due to excess of iron in the body, some toxins can also show bad effects on the liver. This can cause problems of inflammation or damage to the liver. The hepatoprotective (liver protecting) properties present in amla can thus help reduce the effects of these risks . On this basis, it can be said that the benefits of Amla juice include keeping the liver safe.

12. Reduce Inflammation –

The benefits of Amla juice can also prove beneficial in the problem of inflammation. As we have mentioned earlier in the article, Amla has antiinflammatory (inflammatory reduction) properties. Due to this property, the consumption of gooseberry can help to some extent to overcome the problem of inflammation related to bones and muscles. At the moment, further research is still needed on this topic.

13. Make skin shiny –

The benefits of Amla juice can also prove beneficial for the skin. Actually, according to a research related to amla, it has antioxidant properties, which can overcome the effect of free radicals. Also, they can prove to be helpful in cleansing the skin tone . In view of this fact, it can be assumed that the benefits of drinking Amla juice can prove to be helpful in cleansing the skin and keeping it shiny.

14. Beneficial for hair -

Aonla properties can be beneficial for hair along with other health benefits. Vitamin C in amla produces collagen protein, which can be helpful for hair growth. This is the reason why it is also used in hair care products. Due to the properties of amla, it has been revealed by a research conducted on mice by several evidence based supplementary and alternative medicine. Research has suggested that amla is an excellent hair tonic, which can promote hair growth, and it can also help in maintaining the natural colour of hair . Therefore, it can be assumed that the benefits of amla and its juice can be achieved for hair too.

How to use Aonla -

How to use Amla can be well understood through the points given below:-

- ❖ Amla can be used as juice, marmalade and powder.
- ❖ If you want, you can also use it to make hair mask with other fruits.
- ❖ It can also be used to apply on the skin and make a face mask to improve the complexion.
- ❖ Its paste can also be used to apply to the inflamed area.

Conculsion

After knowing the benefits of Amla and the medicinal properties of Amla, you must have now understood how it can be beneficial for health in any form. In such a situation, it is also natural to think of using it regularly. Then what was the delay, read every aspect given in the article thoroughly. Also, keep in mind the things mentioned in the article. We hope that by including Amla in your daily life, you will be able to take advantage of all the natural benefits that result from it.