

## Leeches farming

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**ARTICLE ID: 028**

The best varieties of leeches for leech farming are Medicinalis and Orientalis.



The best kind of leeches are from Russia, Iran and Azerbaijan. Leeches usually take about a year and a half from cocoon to puberty. Leeches are usually fed from the blood of cows, sheep or frogs every two months. Our suggestion to get started

Having a space of 30 meters that can hold two thousand productive leeches.

The equipment that we need for starting in leeches farming are:

- Air conditioner
- Plastic pans
- Water Purifying System
- TDS Meter
- PH Meter
- Farm
- Pumping Fittings
- Aquarium
- Prevent of leeches escaping
- Heating, cooling and humidifying system

Leeches can withstand temperatures of 10 to 30 degrees Celsius. The best temperature required for leeches breeding is 18 degrees Celsius. Reproduction time The room temperature should reach 25 to 26degrees Celsius. The water temperature varies from 4 to 5 degrees and the water temperature is considered.

Types of leeches according to age and size

- Larvae (one to two centimeters)
- Needle (two to four centimeters)
- Match (four to six centimeters)
- Medical (six to eight centimeters)

Which usually become more expensive with the increase of size and age. The most important factor in leech breeding is nothing but water and the most important factor in water is TDS, which stands for total dissolved solids. Which in Persian is the same as solid suspended particles in water.

If the TDS in the water test was above 400 ppm, the water is not suitable for breeding medical leeches TDS water purifier lowers water up to 50ppm, which is very desirable.

- The life of each leech is up to ten years
- It can cocoon for up to five years

The first three years have high cocooning ability, And the diagnosis of young and old productive leeches is not very recognizable, and unfortunately fraud and so-called throwing old leeches instead of young is very high. So, it is better for you to turn a small leech or a cosmetic leech into a productive one with a few feeds. Or buy a large pre-breeding leech or medical leech.

Vote for beach construction in breeding leeches / It is enough to use substrates such as peat soil, moss, algae, aquatic plants.



Algae for the birth of leeches



Cocoon

Undoubtedly, the most important part in leech breeding is leech nutrition, which any negligence after feeding is equal to leech losses.

#### Feeding



Including

- Temperature above 18 degrees Celsius ten days after feeding
- No disinfection of water with salt
- No timely replacement of water
- Lack of water storage in the tank and the presence of chlorine in the water
- The best pH of water for keeping leeches is 5 to 6, which threatens leeches outside this range. No use of oxygen device in water
- Water temperature changes suddenly.
- The most important points in leech breeding
- The most important part of leech breeding is nutrition and finally pure blood free of any additives such as heparin.

Try to coordinate with a butcher so that the sheep, preferably the female, must be slaughtered in the presence and immediately pour the blood into a mixer or containers containing anticoagulant bullets.

The number of forces should be as high as possible

The blood donation process is patient and not all leeches are supposed to be fed at one, the temperature of 25 degrees for a week after feeding should be fully observed

No foreign matter such as salt and doxycycline should be added to water up to one week after feeding.



A few points:

Leech storage pans should not be more than 100 liters because the contamination spreads quickly. Less than fifty liters. It is not recommended due to the hassle of changing the water. If the leech storage pans are classy, do not move the leeches from the upper to the lower floors or vice versa, because the temperature is higher / higher in the upper floors, and in case of transfer to the lower floors, there are losses due to temperature fluctuations.

Due to the cocooning season, it is recommended to take the whole net pan because mosquitoes do not penetrate into the pan and prevent the mosquito from feeding the cocoon.

When sucking blood, leeches secrete a variety of substances that have healing properties. The most famous substance secreted by leeches is heroin. The properties of substances in the blood of leeches are summarized as follows:

Anesthetic properties: Reduced local pain during the bite, which is mainly due to the presence of heroin (heroin). Vasodilating property: due to the presence of histamine.

Anticoagulant: Due to the presence of hyaluronidase enzyme in leech saliva. This special enzyme has a very strong antibiotic and mucus solution, which is very strong in the treatment of glaucoma. Antibiotic properties: This property has recently been considered and has been effective in diseases of the Golden Staff and tuberculosis, bloody diarrhea and diphtheria. Properties of leech saliva

Leech saliva contains more than one hundred types of vital nutrients that can cure various diseases. This small and amazing parasite has a special place in medicine due to its extraordinary ability to treat diseases. Our country has a lot of reserves of this animal and having very valuable and long experiences in this field, it is, unfortunately, alien to leech treatment. In our country, this God-given blessing is not used to relieve pain and suffering, while Iran can be one of the leech treatment centers in the world. Among the species of medical leeches, the best type is the eastern type, which is the type of leeches in Iran. The main healing properties of leeches are saliva treatment, So that he may be able to produce saliva more than his body weight, and when it sticks somewhere in the body, it produces so much saliva water that saliva drips from under the animal's body. Leech saliva extract consists of two categories There are substances that act as neurotransmitters on nerve endings and cause general stimulation of acupuncture points, and others that act as general blood circulation and capillaries and act as anticoagulants, anti-inflammatory and analgesic.