

## The soapnut from Daniyalpur

For centuries, in India and in Nepal, the soapnut ( *Sapindus mukorossi*) has been used for the washings. The Indian women also used the shells of this nut for the personal hygiene. Even nowadays, in the villages, we use a "cleansing basis" elaborated with the Indian nuts for the dishes and the housework. The soapnut has always been used to wash the silk, cotton or wool traditional materials, delicate and very coloured, without using or discolouring them.

The *Sapindus mukorossi* is a soaptree which easily grows in poor grounds, forests, by the roadsides and as far as the cities. It can fight against the soils' erosion by occupying the poor grounds while supplying a lasting and just income to the local populations: a very important asset especially in the poor regions of Piedmont of Himalaya and the North of India in general! This soaptree may measure up to 15 meters high. The fruits appear after about 10 years and the tree is productive for about 90 years. The annual harvest is just before the wet season. The ripe soapnut is golden or brown and sticky because of its large saponins content. The *sapindus mukorossi* gives this sticky substance in order to protect itself against noxious organisms. These dear saponins are in the soapnut's shell and act on contact with water as a detergent.

After the harvest, the nuts are dried and shells and the shells' halves are immediately packaged to protect them from humidity.

### How works the soapnut?

The saponins in the soapnut's shell are soluble in water. They are detergents (surface-active agents) that clean, dry-clean and purify. The dirty marks are cleaned out. The rotation principle of the washing machine is perfectly suitable for an optimal implementation of these soapnuts. The clean washing is pleasantly soft without adding a fabric softener: during the rinsing cycle, the water is cold and often renewed; thus very few saponins get out.

The saponins do not damage the materials and do not attack the colours. They allow to wash the delicate materials, the silk and the wool. The washing is soft and the colours are preserved. It smells clean and is not perfumed.

The saponins are glycosides entirely biodegradable! Natural and without additives of synthesis, they do not undergo transformation or industrial production. The used shell can be composted.

### Soapnut's origin.

The sapanut are usually from Nepal and from North India, the region of Uttar Pradesh and Madhya Pradesh and from the Piedmont of Himalaya.

After the harvest, they are sorted out to keep just those which are of superior quality, cleaned, shelled and packed.

To get more information on the soapnut: [www.lanoixdelavage.fr](http://www.lanoixdelavage.fr)

### Directions of use.

The natural detergent of the soapnut allows to wash the washing, the dishes, the tiled floor or the soils. 1 Kg of soapnut's shells is sufficient for 100-140 wash cycles.

- Washing machine: a 5 Kg coloured washing in fresh water: put 4 to 8 half-shells in a little cotton envelope bag or in a sock. Tie it and put it with your dirty washing in the drum of your washing-machine. Program the machine. The nuts

can remain until the end of the cycle. During the rinsing cycle, the water is cold and often renewed, thus few saponins remain in the washing. You can use the same nuts minimum 3 times for the low temperatures. The 40°C wash frees less saponins than the 60° or the 90° washes. The shells reduced into small pieces free more easily the saponins because the water enters by the cracks. The more you reduce the size, the less you measure out in quantity. But the shells empty more quickly.

Trick: The soapnut do not perfume your washing. Some drops of essential oil on the envelope bag or on the sock containing the soapnut's shells will allow you to personalize your washing with a natural flavour. Furthermore, you have a great choice of perfume: hybrid lavender, orange, ylang-ylang...  
(Given their concentration and activity, essential oil must be used with economy).

To know: The water is more or less hard or fresh according to its content in limestone. As it interferes with the cleansing power of the detergent, more the water is hard, more the necessary quantity of washing powder increases. The most ecological attitude always consists in using the weakest recommended dose with a specific anti-limestone if need, for instance the sodium carbonate. If the washing is very dirty, it is better to resort to the soaking than to force doses.

Trick: Leave the nuts in your sock and hang it out with your washing. During the next wash, for instance, put again two half-shells with those which were already used and so on...

Trick: To recognize a used shell: first, the colour changes, it becomes colourless, lighter. Rub it a bit with a wet finger if it lathers, there are still some saponins.

- The white washing: Add a tablespoon of whitening in your tub: the sodium percarbonate (it does not contain either chlorine or phosphate). The saponins do not have whitening agent naturally. The sodium percarbonate allows you to clear your white washing and your curtains and so avoid the grey veil. For the persistent marks as those of red wine, fruits or some blood on the white washing, also add a tablespoon of whitening. Liberator of active oxygen, he acts as a stain remover and dissolves the difficult marks as those of coffee, herb or fat.

Trick: from time to time, you can dip your washing into a little more important quantity of a mixture of sodium percarbonate and carbonate to make "return" the colour.

- The very dirty washing: Add one or two tablespoons of sodium bicarbonate (besides the nuts) in your tub. It acts as a deodorant. The bicarbonate revives colors.
- Overalls: Put the soapnut's shells in the drum with two or three tablespoons of sodium carbonate (for fresh water) in your tub.
- Wash with cold water (wool): In cold water, the saponins free less in quantity and more slowly. Prefer then the wash with a decoction of soapnut that you made beforehand. Pour it into the tub of your machine.
- Persistent marks: Wet the spots, rub with some soap of Alep or dip the washing into a vinegar/water mixture (be careful about the poor quality elastics), wash than as usual. Remove the marks systematically before the wash to avoid "cooking" the mark during the wash in machine! The soap is not adapted for the wool. It risks to felt.

Trick: The soap of Alep is also an ideal ally of the daily hygiene as shampoo, shaving foam for every person worried of protecting the skin. On an olive oil and butter of noble bay-tree basis, it contains no synthetic product, no colouring agent, no fixative spray of perfume, no by-product of animal fat. It is 100% biodegradable.

- Dishwasher: Put 3-4 half-cracked shells in the heart of the machine, add a tablespoon of sodium percarbonate and carbonate in the reservoir which closes (otherwise half of your usual powder, rather biodegradable!) and choose a program in 60° minimum. The product of rinsing can be replaced by some spirit vinegar. After wash, empty the filter of the machine.

Other possibility: Pour approximately 100ml of decoction of soapnut on the place of the nuts' shells and proceed as above without prewash.

### **The soapnut decoction.**

*For the housework*: Boil 1 litre of water with 10 half-shells in a big enough pan (saponins foam), let cool a bit, boil a second time, let soak at night and then filter. It is ready to use.

Trick: You can mix the shells (very briefly) after having made them boil a first time to have an even more important output.

A more concentrated decoction gets ready by increasing the number of shells in the quantity of water.

The shells already used in the washing-machine or in the dishwasher can be kept once they are dried. As soon as you have a big handful that will be enough for a decoction of 200ml of water. Finally, you can compost your emptied shells and spray your flowers with the water which served for the household.

The decoction had to be kept in a cool place. It can be preserved about 10 days by adding some critic acid, the lemon or the essential oil as the lavender which disinfect it. (The chosen preservative depends on the wished use).

- **Hand wash** for the delicate materials.
- **Cold wash for the wool.**
- **Liquid soap**
- **Shampoo for pets**: a good soft bath for your pet.
- **Universal cleaner**: on the sponge and in your bucket. The household or the car wash will be done without dangerous volatile components.
- **Washing-up liquid**: fill your washing-up liquid flask with a concentrated decoction, add two drops of lemon essential oil to disinfect.
- **Jewel cleaning**: squeeze a half-lemon in a little decoction and brush your jewels with an old toothbrush.
- **Plant-care product**: water or spray a little concentrated decoction all the plants, on the interior and exterior sides. Cover the trunk of your fruit trees with the decoction.

Denial of responsibility: The articles of this notebook generally result from the compilation of information from several personal sources and experiences. Every person applying this information makes it at his own risks. The soapnut takes on no responsibility of the damages susceptible to result from the use of this information.

Put away from the reach of the children.