

— premio 10 moxa



The therapeutic application of heat is a non-invasive practice. It encourages muscle relaxation, diminishes stiffness, locally increases blood circulation, stimulates the immune system... It is effective against pain.

It has a special place in **Traditional Chinese Medicine**, where it is called **Moxibustion**.

Moxibustion, a thousand-year-old practice



The term moxibustion is inseparable from acupuncture, in the Chinese ideogram.

The recent discovery of very old manuscripts in a Chinese tomb (Ma-Wang-Dui) leads one to think that moxibustion might well be earlier and even at the origin of the definition of meridians and acupuncture!

Used for millennia, stimulation by the heat from the flameless combustion of Artemisia is a daily practice, in China, of course, and also in Japan. It is currently the subject of scientific research and important clinics highlighting the many and various physiological mechanisms involved. *For example, work has shown that the stimulation of specific points – bilateral 6Spleen / 67Bladder / 1Kidney – encourages the repositioning of the fetus in cephalic position in the weeks preceding delivery.*

Less impressive than needles

The old texts recommend very wide use of moxibustion, on a par with acupuncture. They present this **technique as simpler, but also taking longer to apply**, even if the results of the treatment are often quicker and more durable... The energy provided is obviously indicated in all the states of emptiness (Blood emptiness, Energy emptiness), being affected by perverse energies, Wind, Cold and Dampness, and also in the reduction of excess, in the cases of Damp Heat, for example. All the deficiency syndromes are associated with a decrease of the defensive system. It is

also always useful to reinforce the immune system, for both prevention and treatment. External energy intake is often more effective than just mobilising the energy of the patient, especially if the latter is limited or deficient.

Moxibustion is yang

Specifically, it is yang in nature, but it can tone *yin* and *yang*, *qi* and blood. It warms the cold, warms and reinforces the *yang*, and can also tone the *yin*, applied to the *yin* meridians that also transport the *qi*. It allows quick mobilization of the Blood and Energy, eliminating stasis.

Your own experience is paramount

The practical application of moxibustion is perfectly described in all the works dealing with Traditional Chinese Medicine, and is doubtless already **part of your practice**.

Simply remember that the two basic medical counter-indications, in Traditional Chinese Medicine, are excess heat and the emptiness of Yin with heat or fire.

Other counter-indications are relative and depend on the condition of the patient and the experience of the practitioner.

Scientific research identifies how **moxibustion** works

Thermosensitive ion channels

Researchers have identified 9 as being thermal sensors, each activated by a specific temperature threshold. These ion channels belong to the superfamily of the Transient Receptor Potential (TRP) and are identified as ThermoTRP (TRPV1, TRPV2, TRPV3, TRPV4, TRPM2, TRPM4, TRPM5, TRPM8 and TRPA1). Studies have shown that these thermosensors were already present in the common ancestors of fish and tetrapods. Some have even been found in invertebrates.

The evolution of vertebrates took place along the same lines, adapted to the specific needs of the species and their environment. For humans, 15°C and 43°C represent the thresholds of unpleasant or painful sensations, and **6 ThermoTRP have been identified (of which 2 concern us more specifically here, TRPV1, triggered above 43° C, and TRPV2 above 52° C)**, that are also found in the correspon-

ding primary neurons (sensory) as well as in all tissue. Each nociceptor has several ion sensors: sensitivity is very fine and extremely reactive.

Moxibustion therefore works by involving specific receptors

These thermoreceptors do not respond to mechanical stimulation. (As a reminder, recall that the mobilized mechanical receptors in acupuncture analgesia use the A beta fibres, which are thicker fibres).

The information mobilizes then the fine A delta fibres and the C polymodal fibres, as well as the central neurons and the cells of the spinothalamic track. The inhibiting inter-neurons modulate nociception, through DNIC (Diffuse Noxious Inhibitory Controls) that block part of the nerve information from moving back up towards the central nervous system

(CNS) and cause **local analgesia**, but which take more time to implement and are more moderate than that induced by puncture.

At the local level, the stimulation of the thermoreceptors (and other polymodal receptors) triggers the liberation of a number of mediators (substance P, somatostatin, ...) that act immediately while causing inflammation:

- an **initial vasoconstriction**, of very short duration, probably a reflex of the vessel wall
- **vasodilatation and increased blood flow**, by antidromic stimulation of the corresponding axon
- **activation of the mast cells, and more generally the immune system** (increase in white blood cell count and activity), over a rather long period (more than 2 weeks)

At the higher level, the summation of the stimuli and the local modifications is integrated and dealt with by the CNS, causing a coordinated, general neuro-humoral response.

A large anatomical and physiological similarity between acupuncture and reflex points (trigger points) has been found, suggesting functioning on similar bases. The application of heat to the reflex points causes the same physiological effects.

Artemisia, a long-time choice as a **heat source**

Artemisia, quality heat

In its primitive form, moxibustion doubtless used various materials, such as heated pebbles (the use of hot rocks is still common), tobacco, cotton, sulphur, monkshood...

But Artemisia has been used for a very long time, for the quality of the heat obtained from burning this dried grass, which then becomes "velvet" before being used as what, or rolled in cones, or rolls...

It even leant its name to the practice outside China, since the name moxa comes from the Japanese mogusa, which means Artemisia!

Artemisia is also used in herbalism, and its essential oil has well known virtues as well as a non negligible toxicity that imposes professional use, reserved for informed practitioners.

Its combustion releases a very fragrant smoke

This can prove to be toxic in the long term. On the other hand, as with all burning matter, it generates ashes that, while falling during the session, can create significant burns on the patient's skin.

If in China aggressive moxibustion (Artemisia deposited directly on the skin and lit) has been practised— and still is, if less so—, leading to serious burns, convalescence requiring local care to avoid the super infections and painful and unsightly scars, Japan and the western world carefully avoid cauterising, and prefer a milder use of the heat.

The risk of burn is even a major reason for patients' refusal of moxibustion, and of the abandoning of the technique for fear of medical and even legal complications.



These constraints, -the long-lasting odour, toxic smoke, risk of burns-, coupled with the need to light and douse the moxa, which does not always happen right away, have led a number of practitioners to renounce this practice nevertheless recognized for its indications and results.



Difficulties with Artemisia or Why make [and use] a "moxa like" ?

To shun moxibustion means being able to use only half of the advantages of Traditional Chinese Medicine, renouncing an effective therapy (*« what acupuncture does not cure can be cared for by the application of moxas »*), losing a precious means for bringing energy to an organism suffering from emptiness of yang...

To rediscover the results of moxibustion, it was necessary to solve two problems:

- **preserve all the basic characteristics of Artemisia in its spectral transmission**
- **eliminate all constraints linked to combustion, as previously mentioned**

With the **Premio 10 moxa** as with Artemisia, the same spectral band, and the same distribution between short, medium and long infrared, ensures an equivalent mobilisation of the physiological receptors, whatever the type and depth. You and your patient will therefore rediscover the sensations and results of moxibustion with Artemisia.

But what you will **not have**, because of safe electric power, is:

- **lighting the moxa**
- **putting it out**
- **toxic smoke**
- **the strong odour, permeating clothes and walls, even stairwells...**
- **the risks of burns from falling ash**
- **patient fear of burns**

Further, a **Concentrator** (removable accessory delivered with the appliance) specially designed so you can, if you wish, focus the radiation on a precise point. Just slide the Concentrator onto the emitter and work with it as if it were a stick of incense. After a few seconds without feeling heat, your patient will describe a tingling sensation of deep penetration of heat, which has led us to call this technique the **"thermal needle!"**

A flexible 3 metre cord, 4 power adapters so it can be used worldwide, and a carrying pouch: the **Premio 10 moxa** has everything for sure and effective use.

The characteristics of the burning Artemisia spectrum...

When Artemisia is lit with a lighter or a stick of incense, it burns without flame, glowing red, and forms ashes that, if not removed (while falling or through the intervention of the practitioner), slows down combustion and modifies the spectral emission..

The heat emitted is in the form of electromagnetic radiation, that is waves carrying energy. The spectral emission is very similar to that of a black body.

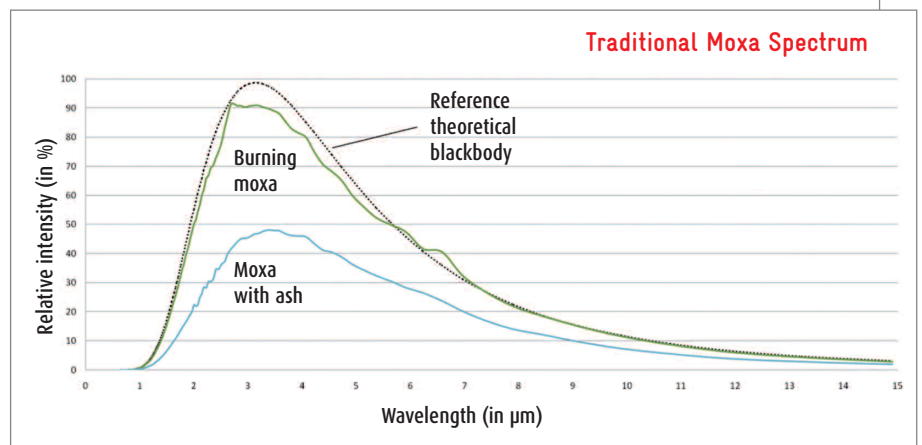
A black body is an ideal object where the electromagnetic spectrum – meaning the distribution of the quantity of energy according to wave length- depends only on its temperature.

This curve has a specific shape, continuous, with a peak corresponding to the wave length carrying the most energy, and a more or less straight slope for smaller and greater wavelengths.

Artemisia: a spectrum in the infrareds

Burning Artemisia has a very broad emission spectrum, with the wavelengths across the red (in the visible spectrum) and short infrared, with a peak situated in the medium infrared, and a strong proportion of long infrared.

If combustion is activated, by blowing over it for example, the temperature of the Artemisia rises to 850-900° C, the spectral peak is situated around 2.6 μm, and there is a high proportion of short and medium infrared. When combustion weakens (presence of ash for example), the temperature of the Artemisia falls to around 650° C, and the peak is close to 3 μm, shifting the spectrum downwards (less energy transmitted) towards the long infrared.



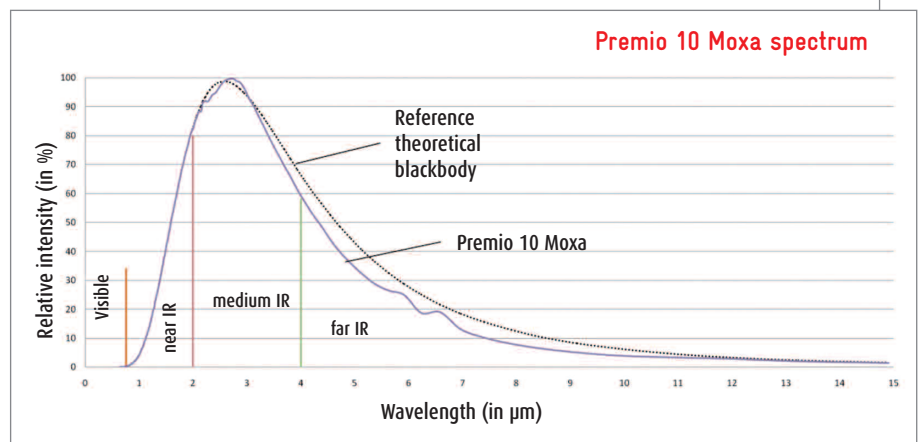
The distribution of wavelengths across such a wide range is a basic characteristic of Artemisia, and largely explains its effectiveness, due to its being appropriate for the physiological, thermo- and photo- receptors of the organism.

It is not enough to provide stimulation with caloric energy, it must be heat that can be absorbed, assimilated and that naturally depends on the receptors' window of electromagnetic sensitivity. Further, the cutaneous thermoreceptors must not be saturated, as they are sensitive to external temperature and, if one exceeds their tolerance threshold, they will lead the patient to reflexively recoil from the pain, limiting the time of application.

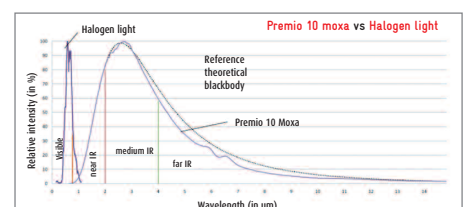
... and of the Premio 10 moxa

The emitter designed for the Premio 10 moxa has spectral emission characteristics itself replicating those of burning Artemisia. It really is a "moxa-like!" !

It behaves like an almost perfect black body, and, when in use, the emitter is stabilized at 850° C, and has a spectral peak to 2,6 μm.



Thus, by way of counter-example, a halogen type emitter, where the emission spectrum is much shorter, and centred on the visible, will not provide the same energy absorbed by the body, even (and especially) if it is at a very high temperature. The patient will almost immediately feel burning, and also very few radiations will penetrate the tissue, being outside the skin's window of sensitivity.



The applications of the **premio 10** moxa

In acupuncture

Familiar gestures, known results

The applications are obviously those of moxibustion, applied to date using a roll of Artemisia. The similarity with Artemisia means that you immediately rediscover all the gestures that you are used to with a roll of moxa, a precise approach, the reactions of your patient to the sensation of heat, ... and the results !

Whenever you have to tone (or disperse), reinforce the Yang or fill an energy emptiness, the **Premio 10 moxa** provides stimulation in accordance with the instructions of the old texts and modern discoveries.



The "Heat Needle" effect

A tingling penetrating heat

The Concentrator, a removable accessory, **focuses** infrared radiation on an area of a few mm². Apply the **Premio 10 moxa** by contact (the insulation protects against burning) or very close to the skin. After a few seconds, your patient **will feel a tingling sensation** of very localised, penetrating heat in the underlying tissue.

A quick, specific effect, precise therapeutic action, for the stimulation of a point in depth.

In auricular therapy

A new stimulation technique

Equipped with the **Concentrator**, you work on a **zone or point**, to **invalidate it**. A much safer and less painful method than cauterization with a stick, without needles (avoiding the stress from the sting for your patient).

You apply strong energy stimulation for an immediate and extended action. This original stimulation technique opens wide the doors of investigation...



In local heat treatment

A precise, safe, effective application

The stimulation of the reflex points noticeably improves **chronic pathologies** :

- the decrease of muscular or articular pain
- the relaxation of contractures and muscular spasms
- the mobilisation of the structures involved in tissue regeneration, the resorption of chronic inflammation, the immune system defences
- an increase in local blood flow, improving the supply of nutrients and eliminating toxins

Research in caloric therapy is today exploring many paths, in particular in the use of the long infrared. Improvement of the quality and permanence of the arterioveinous fistulas for kidney deficiencies in terminal phase and dialysis, and the decrease of nocturnal polyuria through bladder reinforcement, for example, are today the subject of promising clinical trials.

The therapeutic application of heat, a rich application of results.
Today, a simpler, safe and effective technique.