

The Science of Kambo

For the frog it is simple, it rubs itself and uses its milky secretion to protect its skin from water loss in the sun, insects and predators. It has no enemies in the forest. For us, it has many beneficial properties to assist in our wellness.



The Science of Kambo:

Vittorio Erspamer, Italian Scientist of the University of Rome and Nobel Prize nominee, is the 1st documenter of the Phyllorhina Bicolor- Tree frog secretions. He discovered that in the thick layer of the creamy milky secretion of the frog, covering its skin contained peptides. These peptides form a cocktail that are beneficial medical application with great potential. The potential is beyond the normal spectrum of other frogs. Erspamer was nominated for a Nobel Prize twice.

The research activities of Erspamer spanned more than 60 years. His studies on the isolation, identification, synthesis and pharmacological study of more than sixty new chemical compounds. Among these compounds were polypeptides and biogenic amines, as well as some alkaloids. Most of these compounds were isolated from animals, predominantly amphibians.

In the late fifties, his research shifted to peptides. In the laboratories of the Institute of Medical Pharmacology, University of Rome, he isolated from amphibians and mollusks more than fifty new bioactive peptides. These became the subjects of numerous studies in other laboratories in Europe and North America. In 1979, he focused on opioid peptides specific to Phyllomedusa tree frog from Central and South America. These were used by the native Indians in initiation rites, to increase their prowess as "hunters" and make them feel "invincible", gain endurance and focus. They applied secretions from the skin of these frogs that resulted in analgesic effects.

Erspamer's research has become an essential piece in today's continued research which has identified and characterized the functional role of opioid receptors.

Since 1986, further studies of Kambo have isolated several peptides. These are now continually studied and continues to teach us what a valuable and diverse resource it is. Over 90 Kambo patents have been found. Kambo is legal to practice and use in the United States and most other countries.

Further studies: Queens University and the University of Paris have done extensive research with peptides of the skin secretions from the Amazonian tree frog *Phyllomedusa bicolor*. It has been found that one specific peptide contained molecules with antitumor and angiostatic activities. This identified as the antimicrobial peptide Dermaseptin (Drs) B2 had the capability to stop cancer growth.

[Antitumor and Angiostatic Activities of the Antimicrobial Peptide Dermaseptin B2](#)

Information on Peptides?

Polypeptide: A linear organic polymer consisting of a large number of amino-acid residues bonded together in a chain, forming part of (or the whole of) a protein molecule. [Video on polypeptides](#)

Neuropeptides are small protein-like molecules (peptides) used by neurons to communicate with each other. They are neuronal signalling molecules that influence the activity of the brain and the body in specific ways. Neuropeptides modulate neuronal communication by acting on cell surface receptors. They are also responsible for a series of functional interactions that occur at both pre- and postsynaptic levels.

Protein molecules are used by the neurons to communicate with each other. These neuronal signaling molecules are responsible for performing a wide range of brain functions in the body including: Digestion, Appetite, Food intake, Metabolism, Memory, Reward, Reproduction, Learning, Behavior and Analgesia.

Opioid peptides. [What are opioid peptides and how do they work?](#)

Understanding what is in Kambo and why it works:

Kambo medicinal properties are powerful and valuable combinations of bio-active peptides. Research continues on peptides with Kambo, as we learn about the benefits and science our knowledge evolves. Kambo continues to show us how remarkable it can be and its uses in medical world of medicine and pharmacology.

Kambo encourages neuroimmune mechanisms to play in regeneration, healing and synchronizes with neuronal messengers. Beneficial properties of kambo include anti-inflammatory effects, its capacity defeat various types of microbes and viruses. Recent studies have shown that Kambo contains multiple antimicrobial peptides effective against drug-resistant strains of bacteria, fungi, protozoa, parasites and viruses. This development can have more efficient therapy able to treat antibiotic-resistant strains of infectious diseases.

Phyllocaerulein

- Hypotensive neuropeptide
- Potent modulator that stimulates gastric secretion, moderate stimulant of pancreatic secretion, moderates gastric secretions, Stimulates gallbladder and bile ducts.

Tryptophylands

- Effective with candida, yeast in the body.

Phyllomedusin & Phyllokinin

- Powerful vaso-dilator
- Stimulates secretions of glands, tears, saliva, sweat.
- Increasing the permeability of the blood-brain barrier, facilitates access to the brain of these two peptides, and other active peptides.
- Strongly affects intestines, bowels and contributes to deep purging.

Phyllocaerulin & Sauvagine

- Neuro-peptide- smooth muscle contraction.
- Modifies appetite.
- Thermo regulator, vaso dilation.
- Drops blood pressure.
- Helps you to stay in your inner power. Stimulates the adrenal cortex and pituitary gland.
- Supplies body with heightened sensory perception and increased stamina.
- Focus and enhances endurance.
- Sedation- Analgesic effect. Enhances the capacity to face pain. Helps manage stress calmly. Aids in mental shift.
- Digestive aids. Helps bowels and purge effect. (getting well)

Dermorphin

- Relaxation, Blocks pain, Bliss- post session.
- Pituitary release.
- Depressant- anxiety & anger release. Helps with intensity of emotions, letting go.
- Analgesic effect. Pain release. (30-40xs times stronger than morphine, endogenous bendorphines).

Deltorphin

- Relaxation- Triggers feel good.
- Modulates several physiological & pathological conditions such as neurogenesis- growth and development of nervous tissue, pain perception, cancer progression, immune response.
- Transports neuro-amino acids, sugars, electrolytes, through brain/ blood barrier.
- Opiate like activity

Dermaseptin

- 33 amino acids attached to it.
- Kills cancer cells- starves nutrients to them. Stops Growth.
- Potent antimicrobial for both Gram-positive and Gram-negative bacteria, fungus.
- Helps with opportunistic infections.
- Antiviral helps relieve herpes simplex virus.

Adenoregulin

- Acts on the adenosine receptors- Central nervous system modulator on specific receptors.
- Neural activity slows down. Assists in various roles in the heart, regulating myocardial oxygen consumption and coronary blood flow.
- Anti-inflammatory effects and Immune Responses.
- Supports brain functions in regulating the release of dopamine, glutamate and other neurotransmitters