## Phenolic extracts from the Cat's claw

A process to obtain phenolic extracts from *Uncaria tomentosa L*. (Cat's claw) has been developed. The extracts have antioxidant, antimicrobial, and anti-proliferative activity, and they are useful for preparing food additives, cosmetic and pharmaceutical compositions.



Cat's claw. Image: wikipedia.

*Uncaria tomentosa L.*, known as Cat's claw, is a vine from tropical rainforest that is distributed from Peru to Belize. This plant has potential health benefits, such as anti-inflammatory, anti-tumor, immunomodulatory and antioxidant properties. This is due in part to phenolic compounds as procyanidin-type, propelargonidins and flavanolignanes, some of them very rare in nature.

The CSIC and the University of Costa Rica have developed a process for obtaining polyphenol extracts from the aerial and internal parts of Cat's Claw. It uses the entire plant and various extractants in controlled reactions with optimised temperatures and times, combined with the drying and purification processes. The polyphenolic composition of the extracts obtained is fully characterized.

*In vitro* and cell culture studies showed that the extracts possess antioxidant, anti-proliferative and cytotoxic activities against tumor cells as well as antimicrobial activity against pathogenic bacteria (*Staphylococcus aureus*, *Escherichia coli*, *Pseudomonas aeuroginosa*).

The process is simple and low cost, and enables the obtention of compounds for functional food, cosmetics or pharmaceutics. Industrial partners interested in exploiting this technology under patent license are sought.

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