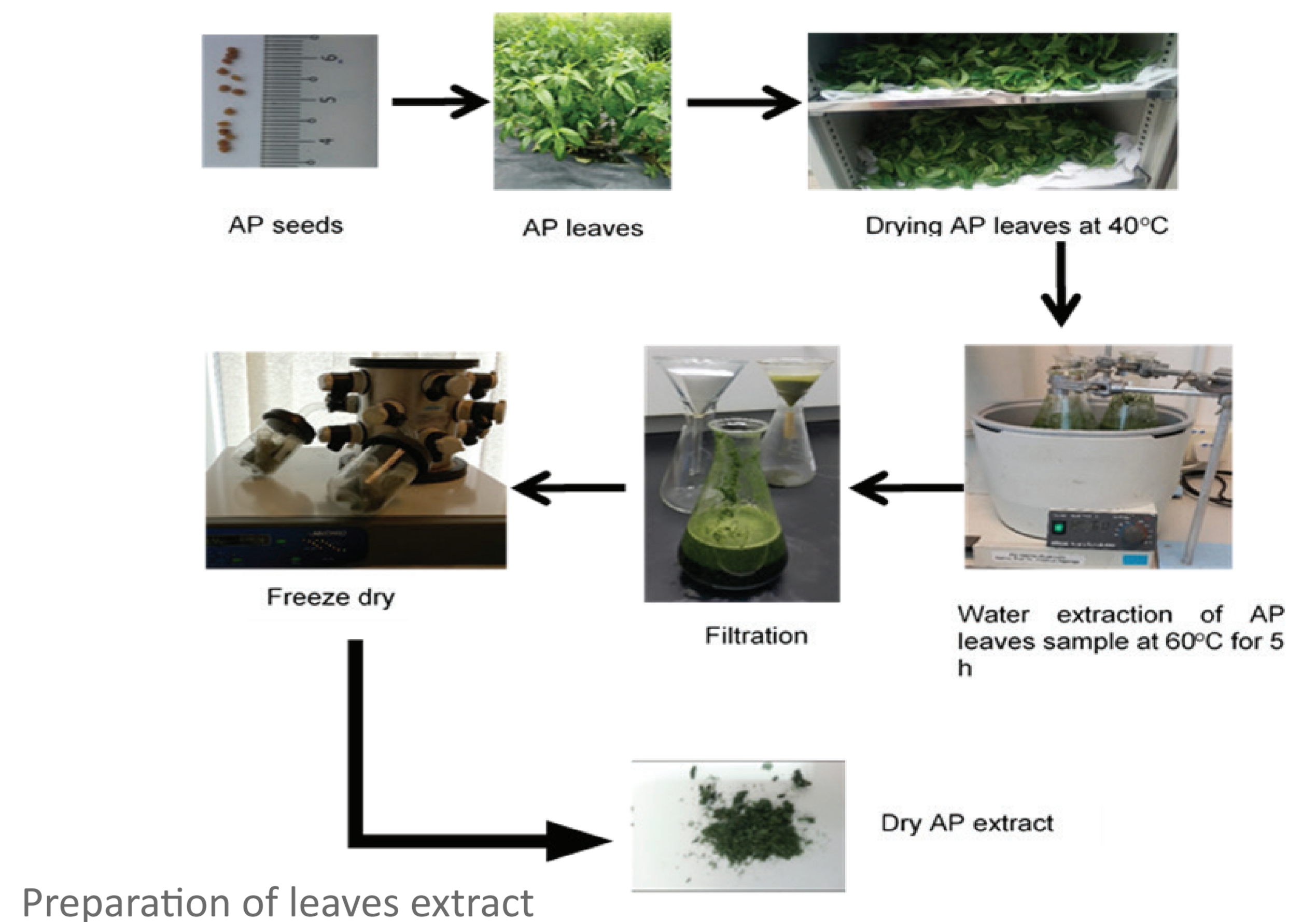


Neuroprotective effect of *Andrographis paniculata* Against Chemotherapeutic-Induced Cognitive Impairment and Peripheral Neuropathy

PATENT NO: PI2019006847



Andrographis paniculata leaves



BRIEF TECHNOLOGY

Andrographis paniculata is a herb known locally as “Hempedu-Bumi”, found throughout Southeast Asia. The innovation from this product applies a standardised aqueous extract of the *Andrographis paniculata* leaves in a powder form for oral administration. The *Andrographis paniculata* powder is dissolved in water only without any organic solvent and displayed anti-inflammatory and antioxidative effects in in-vivo cancer models. The *Andrographis paniculata* powder could be developed as a potential herbal supplement for the prevention of chemotherapeutic-induced cognitive impairment and chemotherapeutic-induced peripheral neuropathy. The plant product is relatively safe, highly available locally and can be developed into a cost effective product.

PROBLEM STATEMENT & CURRENT ISSUES

Approximately 100,000 Malaysians suffer from cancer each year. Chemotherapeutic-induced cognitive impairment occurred in 10% to 40% of all cancer patients and 16% to 75% of cancer survivors, while 30% to 40% may develop peripheral neuropathy after chemotherapy. Treatment of these adverse effects are limited and expensive. Therefore, the current invention provides a cheaper with better efficacy option.

INVENTIVENESS & NOVELTY

- The aqueous extract of *Andrographis paniculata* powder is made with the addition of water only without any organic solvent
- The powder displayed anti-inflammatory and antioxidative effects in *in vivo* cancer models
- A potential herbal supplement for the prevention of cognitive impairment and peripheral neuropathy

USEFULNESS & APPLICATION

- The present invention provides a method of producing a standardised extract of *Andrographis paniculata*
- The aqueous leaves extract of *Andrographis paniculata* as a purely natural herbal product with a promising neuroprotective effect.

IMPACT OF THE PRODUCT

- The plant product is relatively safe, highly available locally and can be developed into a cost effective product
- The estimation for the cost to develop *Andrographis paniculata* is much lower than other products which are used as supplements to reduce cognitive impairment and peripheral neuropathy.
- Product is intended to be used as an oral supplement to protect against the chemotherapeutic-induced cognitive impairment and peripheral neuropathy

MARKET POTENTIAL

A potent neuroprotective supplement that is safe, a natural product and cost-effective for cancer patients with chemotherapeutic-induced cognitive impairment and peripheral neuropathy

TRL : 3 – Experimental proof of concept



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