

PHYLLANTHUS NIRURI REDUCES AZOTAEMIA AND BLOOD VESSEL DYSFUNCTION IN CHRONIC RENAL FAILURE RATS

TECHNOLOGY DESCRIPTION

The technology is extraction of *Phyllanthus niruri* herb or locally known as 'dukung anak' for the treatment regimens for kidney problems. It has also known to reduce the severity of azotaemia and blood vessel damage when consumed on daily basis.

TECHNOLOGY FEATURES

Blood analyses indicated that the level of BUN and serum creatinine was found to be reduced in the test rats. Expression of the blood vessel marker (CD146) was decreased when this herb is fed to rats that have chronic renal failure (CRF). The local herb is beneficial to consumers who are health conscious or kidney patients to prevent further deterioration of renal function.

ADVANTAGES

- *Phyllanthus niruri* is easily available
- Cost of production is lower
- Does not have additional side effects as that of modern medicine

INDUSTRY OVERVIEW

Prospect: Pharmaceutical Industry

Phyllanthus niruri is a widespread tropical plant commonly found in coastal areas, best known by the common names stonebreaker or seed-under-leaf. It is a relative of the spurges, belonging to the *Phyllanthus* genus of Family Phyllanthaceae. It is considered an important which is used for problems of the stomach, genitourinary system, liver, kidney and spleen. It is easily available making in Malaysia relating to a lower cost. Global trade of natural plant products is projected to triple by 2020 with the herbal medicine market expected to grow between 10-20%. In Malaysia, the herbal industry is estimated to grow at the rate of 15% per annum with the market rising from RM7 billion in 2010 to RM29 billion in 2020. The potential consumers are the health conscious consumers and kidney patients, but business is expected mainly from the producers of such herbs. At the moment the SMEs under the pharmaceutical component is around 312 companies. In addition, there are about 139 herbal manufacturers based in Malaysia listed under the Small and Medium Industries.



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