

Agroceutical Products Limited

Company Profile

Agroceutical Products Limited (APL) was established in 2012 to commercialise over 8 years of research by Professor Trevor Walker and colleagues whose aims were to develop a cost-effective and scalable method of producing Galanthamine from daffodils.

Galanthamine has been found to be effective in the treatment of Alzheimer's disease, and has currently been approved in several countries for the symptomatic treatment of senile dementia. However a natural source of Galanthamine is not readily available on the market.



Director, Kevin Stephens and Professor Trevor Walker at APL's daffodil fields

Collaborating with BEACON

The aim of the collaboration with BEACON was to increase the quantity and quality of alkaloid rich material and Galanthamine extracted from different parts of the daffodil. Galanthamine is extracted from the daffodils through a complex process. However this has resulted in a reduced volume of end product. It was due to these circumstances that director Kevin Stephens approached BEACON. Having collaborated with BEACON in the past, Kevin was already aware of the extensive pilot-scale facilities, equipment and skills available.

Although Galanthamine extraction is a difficult process; with APL providing a large quantity of daffodil bulbs and BEACON utilising their equipment and expertise a challenging project was undertaken. With the use of a pilot-scale screw press, filtration equipment, and analytical monitoring (HPLC, high performance liquid chromatography) positive results soon became evident. The research investigations undertaken by BEACON has resulted in a dramatic increase in the quantity of extract.

“ *We began working with BEACON because of their reputation, skills and equipment they offer. No other organization could match it!* ”

Kevin Stephens, Director

Daffodil compound extraction is APL's core business; the collaborative work with BEACON has seen direct benefits to the business and identified future research opportunities for Kevin and his company.

Through the interaction with BEACON, APL is now a consortium member of a new IBERS based ERDF funded project (HiPLExSon). The project will look at developing high throughput downstream purification of Galanthamine and other daffodil alkaloids using high performance countercurrent chromatography (HPCCC).



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For more information: www.agroceutical.com/