Factors affecting galanthamine production in Narcissus

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1. High galanthamine production from plant sources can be achieved by using specified field practices to enhance biomass production and alkaloid levels (This Thesis).

2. Pre-analytical methods are an important step in optimizing metabolite analysis (This Thesis).

3. Location and age of the plant play an important role in its levels of secondary metabolites (This Thesis).

4. Disease can be a trigger for the production of certain plant species specific secondary metabolites (This Thesis).

5. The application of metabolomics is an effective strategy for identifying active compounds in a complex plant extract.

6. Organic synthesis might copy nature but does not have nature's power of producing complex structures that have a clear biological function.

7. Metabolomics is the tool of choice to characterize varieties in crop improvement programs and to evaluate changes in genetically modified crops.

8. Metabolites present in a plant are more diverse than in any other organism thus providing more avenues for drug lead finding.

9. The chemical response of plants (metabolic signals) to the multiple environmental variations can provide us a better understanding of different regulatory processes of the metabolic network.

10. Progress is made by trial and failure; the failures are generally many times more numerous than the successes; reporting the failures would advance research.

11. Compromise for your dreams but never compromise on your dreams.