

Detection of HCN in the Medicinal Plant of *cassia Tora* & *withania somnifera*

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Abstract: All the medicinal plants are not cynogenic the preliminary aim of this work is test of withania somnifera and cassia sophera plant. These plants are found on road side, barren land. These plants detect the positive cynogenic or negative cynogenic. The positive and negative testes not exclude these compounds possibility of occurrence. The HCN production in plants depends up on environmental condition and physiological condition and negative observation. HCN hydrogen cyanide.

Keywords: Medicinal plants cynogenic compounds, positive

1. Introduction

The capacity of plants to produce HCN from a parent's substance is known as cytogenesis. Gibb[1945, 1958, 1961] has recorded production of HCN from members of more than eighty families of angiosperms. He has done classical work on chemotaxonomic aspect of cryogenic plants Gibb (1974). The continuously study of the distribution of cynogenic plants of different parts of the field of biosynthesis of cynogenic glycosides (cone.E.1978).

In effects of poisonous plants on livers stock of humans and animals. Some of these are being utilized regularly in the traditional Indian medicinal system further whetted the interest. An important aspect about cynogenic plants is inhibition of cynogenesis by certain chemicals. The other aspect that enhances this interest is the inherent resistance of some of these cynogenic plants to certain plant pathogens. A recent survey has shown occurrence of about 1800 angiospermic plants in this area. The present study of Tarota and Ashwagandha medicinal plants of root, stem, leaf, fruits, seeds of Nanded District give cynogenic test.

The distribution of the cynogenic glycosides (CGS) in the plant kingdom is relatively wide, the number of CG - Containing taxa is at least 2500 and a lot of such taxa belong to families Fabaceae, Rosaceae, Linaceae, Compositae, Euphorbiaceae and other.

The last part of the present work demonstrates the biological roles of CGS in plant physiological process and in plant defense mechanisms as well. The effect of CGS (HCN) On different animals, the symptoms of poisoning are discussed to cows, goat, sheep, donkeys, horses and chicks.

2. Method of Detection

The plant were correctly identified and the HCN was detected in various parts of plants extracts by simple colour test with sodium picrate after Hydrolysis with dilute HCL piece of filter paper impregnated with sodium picrate solution was suspended over night in a vial containing the hydrolysed seed extract a changes from yellow to brick red colour to paper indicates a positive test for HCN.

Table 1

Name of Plant parts	Name of plant	<i>Cassia Tora</i> (<i>Tarota</i>)	<i>Withania Somnifera</i>
1. Root		-ve	-ve
2. Stem		-ve	-ve
3. Leaf		+ve	+ve
4. Fruit		-ve	-ve
5. seed		+ve	-ve

Table :- 1 show the result of the test for HCH of 10 tests of two medicinal plants 3 parts give positive result for occurrence of HCN. Cynogenic glycoside occur in vegetative tissue.

The negative reports are reconsidered as the HCN production by plants depend upon several factors as the age of the seeds, leaf, fruits & season of the year, day, time & some environmental factors like trees condition & genetic variation.

3. Conclusions

In the present work cynogenic plants protect itself from pest attack & herbivores. This present work now a days playing an important role in in the cancer research. Knowledge of many commonly used medicinal plants with their harmful effects to scientific & other people who were them frequently.

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