Anxiety is an emotional state, unpleasant in nature, associated with uneasiness, discomfort and concern or fear about some defined or undefined future threat. Some degree of anxiety is a part of normal life. Treatment is needed when it is disproportionate to the situation and excessive.¹

_Nordostachys Jatamansi_ is identified by botanists primarily as dried rhizome belonging to the family Valerianaceae. It is an erect perennial herb, 10-60m high with long stout , woody rootstock found in the alpine Himalayas from Punjab to Sikkim and Bhutan at altitude of 3,000-5,000m.

_Nordostachys Jatamansi_ is a natural antianxiety drug which are aimed to control the symptoms of anxiety, produce a restful state of mind without interfering with normal mental or physical function. Although all parts including roots and rhizomes have complex containing volatile essential oil and other biological active compounds. Nevertheless, the principle compound Jatamansone obtained from the rhizomes of _Nordostachys Jatamansi_ differ markedly from antipsychotics and more closely resemble Sedative- Hypnotics. They:-

1. Have no therapeutic effect to control thought disorder of schizophrenia.
2. Do not produce extrapyramidal side effects.
3. Have anticonvulsant property.
4. Produce physical dependence and carry abuse liability.

**Keywords:** Anxiety, Chemical Composition, Biological activity, Parts of _Nardostachys jatamansi_

**INTRODUCTION**

Anxiety is an emotional state, unpleasant in nature, associated with uneasiness, discomfort and concern or fear about some defined or undefined future threat. Some degree of anxiety is a part of normal life. Treatment is needed when it is disproportionate to the situation and excessive.¹

_Nordostachys Jatamansi_ has been traditionally employed in treatment of a wide range of disorders including nervous system, digestive system, circulatory system, respiratory system, urinary system, reproductive system and skin disorders.

Externally it is used in the form of paste. It is used in burning skin. It improves the complexion and is antipyretic. It is effective in many skin disorders. Its fine powder is used in excessive sweating and reducing foul smell of sweat.

**CHEMICAL COMPOSITION OF _Nordostachys Jatamansi_**:

The chemical composition of _Nordostachys Jatamansi_ is highly complex containing volatile essential oil and other biological active compounds. Although all parts including roots and rhizomes have significant and differing medicinal properties. The principle compound Jatamansone obtained from the rhizomes.

Table 1 shows that chemical constituents present in the parts of _Nordostachys Jatamansi_

**Table 1 :- Chemical constituents of parts of _Nordostachys Jatamansi_**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Parts</th>
<th>Chemical Constituents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Rhizomes and Roots</td>
<td>Volatile essential oil (0.5%) (Oleum Jatamansi), resin,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>sugar, starch, gum, bitter extractive matter.²</td>
</tr>
<tr>
<td>2.</td>
<td>Rhizomes</td>
<td>Jatamansone, Sesquiterpene, Seychellene, Seychelane,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>β- sitosterol, ß- sitosterol.³ ⁴</td>
</tr>
<tr>
<td>3.</td>
<td>Roots</td>
<td>Valeranone, valeranal, nardone, calarenol, nardostechone,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>n- hexacosanoyl arachidate, ⁸</td>
</tr>
<tr>
<td></td>
<td></td>
<td>n-hexacosanol, calarene, n- hexacosane, n- hexacosanoyl</td>
</tr>
<tr>
<td></td>
<td></td>
<td>isovalerate, β - sitosterol ⁵ ⁶, norseychelane, seychellen,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>patchouli alcohol, a and β – patchoulenes.</td>
</tr>
<tr>
<td>4.</td>
<td>Oil of Roots</td>
<td>Terpenic coumarins, oroselol, jatamansin ⁹, hydrocarbons,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>β - eudesmol, eulemol, β - sitosterol, angelicin,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>jatamansinol. ¹⁰</td>
</tr>
</tbody>
</table>
Biological activities of chemical constituents of *Nardostachys Jatamansi* are given in Table 2.

**Table 2 :: Biological activities of Chemical constituents of *Nardostachys Jatamansi***

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Chemical Constituents</th>
<th>Biological Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jatamansone</td>
<td>Tranquilizing hypothermic, Antianxiety, Promotes appetite and digestion, Aromatic adjunct</td>
</tr>
<tr>
<td>2</td>
<td>Essential oil</td>
<td>Hypotensive action in dogs, Antimicrobial</td>
</tr>
<tr>
<td>3</td>
<td>Alkaloidal fraction</td>
<td>Hypotensive action in dogs from root and rhizome</td>
</tr>
</tbody>
</table>

Biological activities of parts of *Nardostachys Jatamansi* are shown in Table 3.

**Table 3 :: Biological activity of parts of *Nardostachys Jatamansi***

<table>
<thead>
<tr>
<th>Sr. no</th>
<th>Parts</th>
<th>Activity / uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Roots</td>
<td>Antianxiety, Antispasmodic, Diuretic, Emmenagogue, Nerve Sedative, Nerve Stimulant, Bitter Tonic, Carminative, Deobstruent, Promotes appetite and digestion, Aromatic adjunct</td>
</tr>
<tr>
<td>2</td>
<td>Essential oil of roots</td>
<td>Antianxiety, Sedative, Hypotensive, Antibacterial, Laxative, Abdominal distension, Abdominal pain, Liver enlargement, Jaundice, Cardiac Depressant, Cough, Dyspnoea, Infertility Dysemorrhea, Uterine Inflammation, skin Disorders, Antipyretic, Brain Tonic, Convulsion, Pain, Epilepsy, Hystera, Syncope</td>
</tr>
<tr>
<td>3</td>
<td>Infusion of roots</td>
<td>Antianxiety, Treatment of Spasmatic hysterical affections, Palpitation of the heart, Nervousheadache, Flatulence, Jaundice, Leproxy</td>
</tr>
<tr>
<td>4</td>
<td>Extracts of rhizomes</td>
<td>Antifungal</td>
</tr>
<tr>
<td>5</td>
<td>Entire plant</td>
<td>Analgesic, relief from insomnia and irritability, Antidote in scorpion sting, Antiseptic</td>
</tr>
<tr>
<td>6</td>
<td>Entire plant with Sesamum oil</td>
<td>Nerve Sedative, Promotes growth and Blackness of hair</td>
</tr>
</tbody>
</table>

Compared the effect of active principle of *Nardostachys Jatamansi* with that of quinidine and found that *Nardostachys Jatamansi* produced less prolongation of refractory period and less slowing of conduction than quinidine. The later properly is of distinct advantage over quinidine.

The acute intravenous toxicity of *Nardostachys Jatamansi* in mice was determined and found to be less than that of quinidine.

*Nardostachys Jatamansi* DC [Valerianaceae] is a widely grown plant. It is good substitute for the official *Valerian*. Dried alcoholic extract negative ionotropic activity on isolated rabbit heart. The drug possesses analgesic activity mediated through the Opioidegic receptors. The alcoholic extract of the roots of *Nardostachys Jatamansi* causes an overall increase in the levels of central monoamines and inhibitory amino acids. It possesses hepatoprotective activity [50% ethanol extract of rhizomes]. Elevated levels of Serum Transaminases [aminotransferases] and alkaline phosphatase observed in thioacamide alone treated group were significantly lowered in *Nardostachys Jatamansi* treated group. The extracts are also effective in focal ischemia by virtue of its anti-oxidant activity.

**CONCLUSION**

Ayurveda is one of such inherited tradition of health and longevity. Anxiety is a commonest central nervous disorder affects people worldwide. Indigenous folk medicines, *Nordostachys Jatamansi* have been used generally in their natural forms (fresh juice, paste or dry powder). These include both inorganic and organic constituents of the concerned herbs. Those agents can be scientifically evaluated by using animal model to find out such a novel Anti-anxiety agent which may be able to cure this disease.

**REFERENCES**

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