Justification of use of some medicinal plants in treatment of various diseases in Khulna, Bangladesh

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Citation

Abstract
11 locally used plants were selected and significant literature review was done to find out about their therapeutic activity and chemical constituents to judge their local effects.

INTRODUCTION
Plants are the natural reservoir of many antimicrobial, anticancer agents, analgesics, anti-diarrheal as well as various therapeutic activities. Bangladeshi people have traditional medical practice as an integral part of their culture. A lot of medicinal plants are available for the treatment of various diseases. However, scientific studies have been conducted only to a limited extent with few medicinal plants. In this investigation, 11 locally used plants were selected and significant literature review was done to find out about their therapeutic activity and chemical constituents to judge their local effects.

MATERIALS AND METHODS
A field survey was done during the month June to July in Khulna district of Bangladesh and a list of various medicinal plants and their local use was collected. Then a significant literature review was done to find out about their therapeutic activity and chemical constituents in various journals, Books and Internet. This study provides some fundamental information for researchers.

RESULT AND DISCUSSION
Table 1: Local use and their therapeutic activity and chemical constituents of some medicinal plants of Bangladesh

<table>
<thead>
<tr>
<th>Plant (Family)</th>
<th>Uses in traditional medicine</th>
<th>Reported major constituents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annona squamosa (Annonaceae)</td>
<td>Cancer, tumors, appendix, and liver disease, Rhinocerebrosis</td>
<td>6β, 7α, 9γ-triisopropyl-4-methoxy-3, 6-oxindole-2-carboxylic acid, 4β-hydroxy-3, 6-oxindole-2-carboxylic acid, 6β-oxindole-2-carboxylic acid, 4β, 6β-diisopropyl-3, 6-oxindole-2-carboxylic acid.</td>
</tr>
<tr>
<td>Bixa orellana (Bixaceae)</td>
<td>Fever, thirst, diarrhea, itch</td>
<td>Mucuna 3-chloromethyl-3-galactoside.</td>
</tr>
<tr>
<td>Catharanthus roseus (Apocynaceae)</td>
<td>As an antitumour and anthelmintic</td>
<td>Tabuladine A, B, Tabuladine C, Celaquidin, Chelavirin A, B, C.</td>
</tr>
<tr>
<td>Pseudopanax elatus (Monocot)</td>
<td>Boils, toothache, rheumatism, lung disease, inflammation, stomach, death, vomiting, hallucinations</td>
<td>Bengaloside, leucocryptins, leucoantherin, glycosides, betatautocarpol, tetraacetate, betatautocarpol, quercetin-3-glucoside and rutin, tiglic acid and none of gamma-taraxerol, pinnoside, taraxerol-3-glucoside, fructos and rhamnogalacturon.</td>
</tr>
<tr>
<td>Laurus nobilis (Lauraceae)</td>
<td>Leucoplast and phlobaphenes, Ulcers, toothache, mouth, soreness, repugor</td>
<td>(2R,3R)-1-(2,3-5,7,3-octadecanoyl)-1, 2,3-trihydroxy-di-benzole, (2R,3S)-1-(2,3-5,7,3-octadecanoyl)-1, 2,3-trihydroxy-di-benzole, (2R,3S)-1-(2,3-5,7,3-octadecanoyl)-1, 2,3-trihydroxy-di-benzole, (2R,3S)-1-(2,3-5,7,3-octadecanoyl)-1, 2,3-trihydroxy-di-benzole.</td>
</tr>
<tr>
<td>Eleutherococcus senticosus (Saxifragaceae)</td>
<td>Neurological disorders, Smallpox, throat infection</td>
<td>Follic acid, L - ascorbic acid, cyanidin-3-glucoside, cyanidin-3-rutinoside, malvidin-3-sulphate, alpha-methylene cyclopentene, gallocatechins.</td>
</tr>
<tr>
<td>Pongamia pinnata (Leguminosae)</td>
<td>Blooded pils, skin and mucous membrane, tongue, whooping cough, soreness</td>
<td>Kuanin, osentine, pongamidine, tannin, betulinic acid, eugentoside, pongonin, glucoside, dehydrokuanin, (3S, 4S, 5S, 7S, 8R, 9S, 10S, 11R, 12R, 13R)-9, 10-dimethyl-11-oxa-7-endo-7, 10-dien-2-one.</td>
</tr>
<tr>
<td>Quassia indica (Dipterocarpaceae)</td>
<td>Diarrhoea, fever, nausea, cold in children, boils, ulcers, leucoderma</td>
<td>Quassin, quassin A, quassin B, quassin C.</td>
</tr>
<tr>
<td>Sesamum indicum (Pedaliaceae)</td>
<td>Sore eye, wounds, and leprosy infection, Nervous debility</td>
<td>Anacardic acid, resveratrol, bilirubin, malvinone, m-dextrin I, dextrin II, m-dextrin A, bilirubin A, bilirubin B, sesamin, sesamolin, total dihydroanthocyanins, safrol, tetrahydroanthocyanins, naringenin, dihydroflavonones, flavones, flavonoids, flavanones, flavonols, flavonoid, biliferone A, O-methyl flavone A2, O-Terr-butyl biliferone A, A.</td>
</tr>
</tbody>
</table>

Figure 1
CONCLUSION

From the study it is clear that there is more need of research in these plants to isolate and identify the active compound which works as active drug.

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References

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