INTRODUCTION

Scientific Name: Helicteres isora Linn.  
Family: Sterculiaceae.

DESCRIPTION

Helicteres isora is a large shrub used as an antispasmodic, anti-worm, antipyretic, antidiarrhoeal and anti-dysenteric. Stems of this plant are used as anthelmintic and abdominal pain while fruits are used in anticonvulsant and abdominal pain. Traditionally, the root juice is used in treatment of diabetes, emphysema, and snake bite. In Java, H. isora is found in relatively dry areas up to 300 m altitude, the habitats including teak forests, brushwood and roadsides. In Thailand, it is found in deciduous for ests and scrub areas.

Cultivation and harvesting

Helicteres isora is a gregarious species common in evergreen forests and secondary jungles along roads and forest edges.

Morphological description

A large shrub, bark grey, leaves 7.5-15.0 cm, alternate in two opposite rows. Round-ovate, short-pointed, rough, velvety, stipules 6 mm, linear, deciduous, flowers 2.5-5 cm long, 2-4 together in a cluster on short stalks, seeds are numerous. It is aboriginal to...
India and Pakistan but also found in Central & Western Peninsula, Sri Lanka. Medicinally used parts are bark, fruit and root 6.

Pharmacological activity

Aqueous extract of bark of *Helicteres isora* shows antihyperglycemic activity and in-vivo antioxidant activity in streptozotocin induced diabetic rats 7. In-vitro cytoprotective activity of methanolic extract of *Helicteres isora* was noticed that it has activity against lymphocytes and anti-tumor activity against the B16F10 melanoma cell line. *Helicteres isora* found significant cytoprotective activity against the tumors as well as normal cells 8. It showed remarkable anti-nociceptive activity 9. Hypoglycemic and hepatoprotective activity was also seen in *Helicteres isora* 10. Cytotoxic activity was seen in Cucurbitacin B and isocucurbitacin B 15. Water extract of fruits showed inhibitory activity of the of Helicteres isora against reverse transcriptase from avian myeloblastosis virus 11 and antiHIV-1 activity 12. Six neolignans, the helicterins A–F were isolated from aqueous extract of the fruits 13, *Helicteres isora* also contains flavonoid glucosides 14.

Table I. Chemical constituents of *Helicteres Isora* 14

<table>
<thead>
<tr>
<th>Name Scientific</th>
<th>Chemical structure</th>
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<tbody>
<tr>
<td>Beta-caryophyllene</td>
<td><img src="image" alt="chemical structure" /></td>
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<tr>
<td>Daucosterol</td>
<td><img src="image" alt="chemical structure" /></td>
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<tr>
<td>Sitosterol</td>
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<tr>
<td>Cucurbitacin B</td>
<td><img src="image" alt="chemical structure" /></td>
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REFERENCES

1. Al Yahya MA., Phytochemical studies of the plants used in traditional medicine of Saudi Arabia, Fitoterapia, 57, 179–182 (1986).
9. Qu WH, Li JG, Wang MS., Chemical studies


