Radix Angelicae dahuricae

_Baizhi_

**Pharmacopoeias:**
Chinese Pharmacopoeia X


**Official drugs:**

Angelica dahurica (Fisch. Ex Hoffm.) Benth. et Hook f.

Angelica dahurica (Fisch. Ex Hoffm.) Benth. et Hook f. var. formosana (Boiss.) Shan et Yuan

– Apiaceae –

The drug is known as Xiang Bai Zhi, Byakushi (Japanese), Paegchi (Korean) and Chinese Angelica Root (English).

**Description of the drug:**

Long-conical, 10–25 cm long, 1.5–2.5 cm in diameter. Externally greyish-brown or yellowish-brown, the root stock obtusely quadrangular or subrounded, with longitudinal wrinkles, rootlet scars and lenticel-like transverse protrudings, some of them arranged in four longitudinal rows. Apex with dented stem scars. Texture compact, fracture white or greyish-white and starchy, cambium ring brown, subsquare or subrounded, scattered with many brown oil dots in bark. Odour aromatic; taste pungent and bitter.

**Pretreatment of the raw drug**

Eliminate foreign matter, grade according to size, soak briefly, cut into thick slices and dry.

**Medicinal use**

In Traditional Chinese Medicine the decoction is used as an antipyretic and analgesic for patterns of externally contracted wind-cold, especially those with headache; it is also used for supraorbital pain, nasal congestion, and toothache.

Externally it reduces swelling and expels pus in early stages of surface sores and carbuncles.

The drug expels dampness and alleviates discharge, in particular vaginal discharge.
Main constituents (see Fig. 1)\(^{5–20}\)

- **furanocoumarins**: e.g. imperatorin, isoimperatorin, phellopterin, bergapten, cnidilin\(^{6–10}\)
- **coumarins**: e.g. scopoletin, 7-demethylsuberosin, cedrelopsin\(^{6–8}\)
- **coumarin glycosides**: e.g. nodakenin, 3’-hydroxymarmesinin\(^{11}\)
- **polyacetylenes**: falcarindiol\(^{12}\)
- **steroles**: stigmasterol, sitosterol,
- **lactones**: β-angelica lactone, 2-hydroxy-3,4-dimethyl-2-butene-4-olide, γ-nonalactone and γ-decalactone\(^{13–15}\)
- **unsaturated fatty acids**\(^{12}\)

Effects and indications according to Traditional Chinese Medicine\(^{1,2,3,4}\)

<table>
<thead>
<tr>
<th>Taste:</th>
<th>acrid</th>
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<tbody>
<tr>
<td>Temperature:</td>
<td>warm</td>
</tr>
<tr>
<td>Channels entered:</td>
<td><em>lung, stomach</em></td>
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<tr>
<td>Effects:</td>
<td>dispels wind, removes damp, clears blocked noses, relieves pain and promotes subsidence of swelling and drainage of pus.</td>
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<td>Symptoms and indications:</td>
<td>headache, particularly pain in the forehead, and blocked nose due to colds; sinusitis; toothache; excessive leukorrhea; swelling, painfull sores and wounds.</td>
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Fig. 1: Formulae of the main constituents