



***Betula platyphylla* var. *japonica* Hara**

Betulaceae

Korean Name: Ja-jag-na-moo

English Name: Japanese white birch

Parts used. Bark.

Traditional uses. Tonic, haematic, internal disease, inflammation.

Description. Deciduous, monoecious tree to 20 m tall, with white bark. Branchlets dark purple-brown, glandular. Leaves alternate, ovate to triangular-ovate, 5-7 cm long, 4-6 cm wide, acuminate, mostly broadly cuneate at base, unequally serrate, glabrous or sparsely short-pilose beneath, with brownish axillary hairs, petioles 1.5-2 cm long. Flowers unisexual, borne in catkins, male catkins forming in autumn, remaining naked during the winter, and opening in spring, female catkins becoming conelike, with 3-lobed scales. Nuts narrowly obovate to ovate, 1.2-2.2 mm long, puberulous, wings 1.5-2 times wider than the nuts, ripening in Sep. Apr. - May.

Habitat. High mountain elevations.

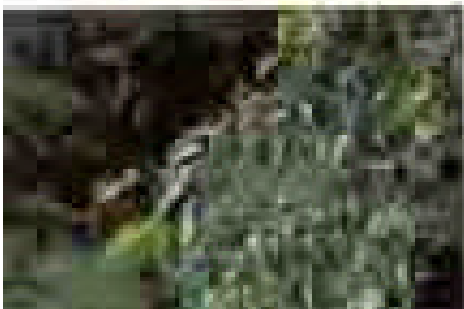
Distribution. Korea, Japan, northern China.

Bio-Activities. Antifungal activity (1).

Chemical components. Triterpenoids; lupeol, betulin, betulafoliatediol, betulafolienetriol, oleanolic acid, platyphyllin, platyphyllonol, betuloside, betuligenol, paeonol, betulafolienetetraol (2), betulafolienepentaol (3). Flavonoids; myricetin, myricitrin, hemiphloin, hyperoside (4).

References.

- (1) Yokota, M. *et al.* (1978) *Yakugaku Zasshi* **98**, 1607.
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- (3) Han, B. H. and Song, B. J. (1977) *Phytochemistry* **16**, 1075.
- (4) Lee, M. W. (1994) *Kor. J. Pharmacog.* **25**, 199.



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