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## ZANTHOXYLUM L. - Yellow wood - Rutaceae

### *Zanthoxylum acanthopodium* DC.

**Synonyms** ▶ *Zanthoxylum acanthopodium* DC. var. *timbor* Hook.f.

**Common Names** ▶ Chinese pepper, tomar seed; *Chinese*: guo ma ka; *German*: Chinesischer Pfeffer; *Hindi*: darmar, tejphal; *Vietnamese*: sèn

**Usage** ▶ flavoring

**Parts Used** ▶ seed

**Distribution** ▶ Himalayas, N Bengal, Naga and Khasi hills, China, India, Vietnam

**Note** ▶ In S China cultivated and utilized for its pleasant flavor; the plant has a peculiar flavor of coriander; products of wataru oil (from the fruits) are used in perfumery.

Hanelt 2001; Shiva et al. 2002; Teuscher 2003; Wealth of India 11, 1976

### *Zanthoxylum acanthopodium* DC. var. *timbor* Hook.f.

➤ *Zanthoxylum acanthopodium* DC.

### *Zanthoxylum alatum* Roxb.

➤ *Zanthoxylum armatum* DC.

### *Zanthoxylum armatum* DC.

**Synonyms** ▶ *Zanthoxylum alatum* Roxb.

**Common Names** ▶ Chinese pepper, Szechuan pepper; *Chinese*: hua jiao; *German*: Chinesischer Pfeffer, Szechuanpfeffer; *Hindi*: darmar, nepali dhaniya; *Japanese*: fuyu-sanshō; *Sanskrit*: tumburu, dhiva, gandhalu; *Vietnamese*: sengai;

**Usage** ▶ spice

**Parts Used** ▶ seed

**Distribution** ▶ India, Pakistan, Nepal, Himalayas, Malaysia, Philippines

Chauhan 1999; Dalby 2000; Davidson 1999; Erhardt et al. 2002; Facciola 1990; Hanelt 2001; Hiller/melzig 1999; Oyen/Dung 1999; Sharma 2003; Small 1997; Tucker 1986; Wealth of India 11, 1976

### *Zanthoxylum avicennae* (Lam.) DC.

**Synonyms** ▶ *Fagara avicennae* Lamk., *Zanthoxylum diversifolium* Warb., *Zanthoxylum tidorensis* Miq.

**Common Names** ▶ *Indonesian*: karangeang, *Pilipino*: bagatambal

**Usage** ▶ spice: leaf resembling coriander leaves; seeds like anise; flavoring (fruit)

**Parts Used** ▶ leaf, seed, fruit

**Distribution** ▶ Thailand, China, Indonesia, Malaysia

Guzman/Siemonsma 1999; Oyen/Dung 1999; Uphof 1968

### *Zanthoxylum bungeanum* Maxim

➤ *Zanthoxylum simulans* Hance

 **Zanthoxylum budrunga** *Wall. ex DC.*

➤ *Zanthoxylum rhetsa* DC.

 **Zanthoxylum bungei** *Planch.*

➤ *Zingiber simulans* Hance

 **Zanthoxylum clava-herculis** L.

**Common Names** ▶ Hercules' club, pepper bark, Southern prickly ash, toothache tree, West-India yellow wood; *German*: Westindisches Gelbholz

**Usage** ▶ flavoring

**Parts Used** ▶ bark

**Distribution** ▶ C USA, except WC USA

Berger 1, 1949; Hiller/Melzig 1999; Newall et al. 1996; Rao/Davies 1986; Sharma 2003; Uphof 1968; Wiersema/León 1999

 **Zanthoxylum coreanum** *Nakai*

**Common Names** ▶ Korean yellow wood; *German*: Koreanisches Gelbholz; *Korean*: woangtschopinamu

**Usage** ▶ spice

**Parts Used** ▶ leaf, fruit, bark

**Distribution** ▶ Korea

Hanelt 2001

 **Zanthoxylum diversifolium** *Warb.*

➤ *Zanthoxylum avicennae* (Lamk) DC.

 **Zanthoxylum fraxinoides** *Hemsl.*

➤ *Zanthoxylum simulans* Hance

 **Zanthoxylum gillettii** (*de Wild.*) *Waterm.*

➤ *Fagara zanthoxyloides* Lam.

 **Zanthoxylum limonella** (*Dennst.*) *Alston*

➤ *Zanthoxylum rhetsa* (Roxb.) DC.

 **Zanthoxylum nitidum** *Bunge*

➤ *Zanthoxylum simulans* Hance

 **Zanthoxylum oxyphyllum** *Edgew.*

**Common Names** ▶ *Assam*: mezzenga; *Nepal*: timur, bhansi timur, szri

**Usage** ▶ condiment of curries

**Parts Used** ▶ fruit

**Distribution** ▶ Himalayan region, in India also cultivated

Hanelt 2001; Kumar 2003; Wealth of India 11, 1976

 **Zanthoxylum parviflorum** (*A. Rich.*) *Benth.*

**Common Names** ▶ small-flowered pepper; *German*: Kleinblütiger japanischer Pfeffer

**Usage** ▶ spice, used like pepper

**Parts Used** ▶ seed

**Distribution** ▶ Japan, China, Australia

 **Zanthoxylum piperitum** DC. 

**Synonyms** ▶ *Fagara piperita* L.

**Common Names** ▶ Indian pepper, Chinese pepper, Sichuan pepper, Japanese prickly, Japanese pepper, Sichuan pepper, Szechuan pepper; *Chinese*: ch'uan chao, nan chiao, chiao mu; *French*: poivre Szetchuan, clavalier poivrier; *German*: Japanischer Pfeffer, (Echter) Szechuanpfeffer, Chinesischer Gelbholzbaum, Sichuanpfeffer; *Japanese*: sanshō, sansho; *Korean*: chophinamu, sanchonamu; *Russian*: japonckij perez, santoksiljum peretschnij, peretschnik; *Slovakian*: fagara; *Thai*: malar

**Usage** ▶ condiment (seed), pot herb (young leaf)

**Parts Used** ▶ seed, leaf

**Distribution** ▶ N China, Japan, Korea, Mongolia, also cultivated Hawaii

Adesina 1986; Bois 1934; Boisvert/Hubert 2000; Craze 2002; Da-



■ **Zanthoxylum piperitum, fruits**

vidson 1999; Erhardt et al. 2002; Hanelt 2001; Hiller/Melzig 1999; Jiang et al. 2001; Jiang/Kubota 2004; Lihua Jiang et al. 2001; Kojima et al. 1997; Kusmoto et al. 1968; Lück 2000; Melchior/Kastner 1974; Norman 1991; Pfänder/Frohne 1987; Pochljobkin 1974, 1977; Sakai et al. 1968; Schulze-Motel 1986; Seidemann 1993c; Seidemann/Siebert 1987; Shimoda et al. 1997; Siewek 1990; Small 1997; Teuscher 2003; Tucker 1986; Uphof 1968; Yasuda et al. 1982; Yong-Doo Kim 2000; Zeven de Wet 1982

### **Zanthoxylum planispinum** Sieb. et Zucc.

**Common Names** ▶ Chinese pepper; *Chinese*: hua chiao, zhu ye jiao; *French*: clavalier à épines planes; *German*: Breitdorniger Pfeffer, Chinesischer Pfeffer; *Hindi*: darmar, nepali dhaniya, tejphal; *India*: tezbal, timal, timbar, tundopoda; *Sanskrit*: dhiva, gandhalu tumburu

**Usage** ▶ spice

**Parts Used** ▶ fruit

**Distribution** ▶ China, Japan, Korea, Riukiu Islands, Taiwan

Bois 1934; Dalby 2000; Davidson 1999; Hanelt 2001; Schultze-Motel 1986

### **Zanthoxylum rhetsa** (Roxb.) DC.

**Synonyms** ▶ *Fagara rhetsa* Roxb., *Zanthoxylum budrun-ga* Wall. ex DC., *Zanthoxylum limonella* (Dennst.) Alston

**Common Names** ▶ Indian prickly ash, Indian pepper, lemon pepper (tree), *French*: clavalier d'Inde; *German*: Indischer Pfefferbaum, Japanischer Pfefferbaum, Falsche Kubeben; *Hindi*: badrang; *India*: tambol, tirphal, rhetsamaramu, ilarangom, mullillam; *Javanese*: kadjeng siti, kaju lemal; *Malaysian*: hantar duri; *Sanskrit*: ashvaghra, atitejani, sutejasi, timur; *Sri Lanka*: katu-kina, rhetsu; *Thai*: kanchatton

**Usage** ▶ spice

**Parts Used** ▶ immature fruits, seed; **product**: essential oil (seeds)

**Distribution** ▶ India, Sri Lanka; also cultivated, Indonesia

**Note** ▶ Seeds as a substitute for pepper by the indigenous population.

Arora/Pandey 1996; Bois 1934; Davidson 1999; Hanelt 2001; Jirovetz et al. 1998; Lück 2004; Schultze-Motel 1986; Seidemann 1993c; Shiva et al. 2002; Small 1997; Teuscher 2003; Uphof 1968; Wealth of India 11, 1976; Wiersema/León 1999; Yasuda et al. 1982

### **Zanthoxylum senegalensis** DC.

▶ *Fagare zanthoxyloides* Lam.

### **Zanthoxylum simulans** Hance

**Synonyms** ▶ *Zanthoxylum bungeanum* Maxim, *Zanthoxylum bugei* Planch., *Zanthoxylum fraxinoides* Hemsl., *Zanthoxylum nitidum* Bunge,

**Common Names** ▶ Chinese pepper, Chinese prickly ash pepper; Szechuan pepper, Sichuan pepper; *Chinese*: ch'uan jiao; *French*: poivre chinois, poivre de la Chine, clavalier de Bunge; *German*: Chinesischer Pfeffer, Sech(z)uan-Pfeffer, Sichuan Pfeffer, Täuschende Stachelesche; *Vietnamese*: rau sung, trong

**Usage** ▶ spice, used like black pepper; leaf as seasoning

**Parts Used** ▶ seed, leaf

**Distribution** ▶ N and C China, E Asia; plants in the former Soviet Union

**Note** ▶ Often an adulterant for black pepper (*Piper nigrum* L.).

Bois 1934; Chen et al. 1994 b, 1995; Chyau et al. 1996; Dalby 2000; Davidson 1999; Ma Chuan-guo 2002; Ogle et al. 2003; Schultze-Motel 1986; Seidemann 1993c; Small 1997; Tirillini/Stoppini 1994; Tirillini et al. 1991; Tscheucher 2003; Uphof 1968; WHO 1990; Wiersema/Léon 1999; Wu/Chen 1993; Xiong et al. 1995; Zeven/de Wet 1982

### **Zanthoxylum tessmannii** (Engl.) J.-F. Ayafor.

**Synonyms** ▶ *Fagara tessmannii* Engl.

**Common Names** ▶ African pepper; *French*: poivre africain; *German*: Afrikanischer Pfeffer; *Cameroon*: nashou

**Usage** ▶ spice (for sauces)

**Parts Used** ▶ fruit

**Distribution** ▶ Equatorial Guinea, Congo, Cameroon; also cultivated

Hanelt 2001; Schultze-Motel 1986; Teuscher 2003; Westphal et al. 1980

### **Zanthoxylum tidorensis** Miq.

▶ *Zanthoxylum avicennae* (Lamk) DC.

### **Zerumbet speciosus** J.W. Wendl.

▶ *Alpinia zerumbet* (Pers.) B.L. Burtt et R.M. Sm.

## ZINGIBER Boehm. - Ginger - Zingiberaceae

### **Zingiber amaricans** Bl.

▶ *Zingiber zerumbet* (L.) Rosc. ex Sm.

### **Zingiber aromaticum** Noronha

▶ *Zingiber officinale* Rosc.

### **Zingiber blancai** Hassk.

▶ *Zingiber zerumbet* (L.) Rosc. ex Sm.

### **Zingiber cassumunar** Roxb.

**Synonyms** ▶ *Amomum montanum* Koenig, *Cassumunar roxburghii* Colla, *Zingiber luridum* Salisb., *Zingiber montanum* (Koenig) Dietrich, *Zingiber purpureum* Rosc.

**Common Names** ▶ Bengal ginger, cassumunar ginger; *French*: gingembre marron; *German*: Blockzitwer, Gelber Zitwer; *India*: jangliadrak; *Indonesian*: banglai; *Javanese*: bengle; *Malaysian*: bangle, bolai, bunglai, lampoyang; *Thai*: phlai, puloei, wan-fai

**Usage** ▶ spice, condiment

**Parts Used** ▶ rhizome

**Distribution** ▶ Java, also cultivated, cultivated elsewhere tropical Asia: Cochin, China, Malaysia

Arora/Pandey 1996; Bois 1934; Guzman/Siemonsma 1999; Kumar 2001; Masuda/Jitoe 1994; Melchior/Kastner 1974; Schultze-Motel 1986; Seidemann 1993c; Seidemann/Siebert 1987; Teuscher 2003; Uphof 1968; Wu et al. 2000; Zevende Wet 1982

### **Zingiber chrysostachys** Ridley

**Common Names** ▶ *German*: Goldähriger Ingwer; *Malaysian*: lempui

**Usage** ▶ spice (locally)

**Parts Used** ▶ rhizome

**Distribution** ▶ Malaysia

**Note** ▶ Alternative for *Zingiber zerumbet* (L.) J.E. Sm.

Burkill 1966; Guzman/Siemonsma 1999; Holttum 1950; Kumar 2001; Theilade 1996

### **Zingiber littorale** Val.

▶ *Zingiber zerumbet* (L.) Rosc. ex Sm.

### **Zingiber luridum** Salisb.

▶ *Zingiber cassumunar* Roxb.

### **Zingiber mioga (Thunb.) Rosc.**

**Synonyms** ▶ *Amomum mioga* Thunb.

**Common Names** ▶ mioga ginger, Japanese (wild) ginger; *Arabic*: zangabeel, *Chinese*: xiang he, jang ho; *French*: zédoaire; *German*: Japanischer Ingwer, Japaningwer; *Italian*: zenzero; *Japanese*: myouga, mioga; *Korean*: yangha; *Malaysian*: temu kuning; *Portuguese*: gengibre; *Russian*: imbir; *Spanish*: jengibre;

**Usage** ▶ spice

**Parts Used** ▶ rhizome

**Distribution** ▶ Japan, China, India, also cultivated in E Asia: China, Japan, Korea, Hawaii

**Note** ▶ The rhizomes have a bergamit-like flavor.

Abe et al. 2002; Bois 1934; Davidson 1999; Duke/Ayensu 1985; Erhardt et al. 2002; Guzman/Siemonsma 1999; Han et al 1983; Hanelt 2001; Jung-Hye Shin et al. 2002; Melchior/Kastner 1874; Schultze-Motel 1986; Seidemann 1993c; Seidemann/Siebert 1987; Small 1997; Staesche 1972; Täufel et al. 1993; Teuscher 2003; Uphof 1968; Wiersema/León 1999; Zeven/de Wet 1982

### **Zingiber montanum (Koenig) Dietrich**

▶ *Zingiber cassumunar* Roxb.

### **Zingiber nigrum Gaertn.**

▶ *Alpinia nigra* (Gaertn.) Burt

### **Zingiber officinale Rosc.**

**Synonyms** ▶ *Amomum angustifolium* Salisb., *Amomum zingiber* L., *Zingiber aromaticum* Noronha, *Zingiber zingiber* Karst.

**Common Names** ▶ ginger, common ginger; *Arabic*: al-zangabeel, zenjabil; *Chinese*: chiang, jiang; *Dutch*: gember; *French*: gingembre; *German*: Echter Ingwer, Ingwer; *Hindi*.: ada, ale, adrak, sonth; *Indonesian*: jahe, jae, lia; *Italian*: zenzero officinale; *Japanese*: shoga, shouga; *Korean*: saenggang, saeyang; *Malaysian*: haliya, jahi, atuja; *Pilipino*: luya, baseng, laya; *Portuguese*: gengibre, gengibre amarelo, gengibre das boticas; *Russian*: imbir', eljy koren', zingiber; *Sanskrit*: ardraka (fresh ginger), singabera, sunthi (dry ginger); *Slovakian*: dum-



 **Zingiber officinale, fresh rhizom**

bier; *Spanish*: jengibre, gengibre ofical; *Thai*: khing, khing-daeng; *Turkish*: zentzephil; *Vietnamese*: gung

**Usage** ▶ spice, (fresh, dry, candied, shoots, and preserves); **product**: essential oil

**Parts Used** ▶ rhizome

**Distribution** ▶ frequent cultivated in the Tropics, especially in tropical Asia: China, India, Indonesia and Australia, W Africa; probable origin in tropical Asia

**Note** ▶ Fresh ginger-rhizome are often candied and used in confectionery.

Akhila/Tawari 1984a; Aris 2001; Atal et al. 1981; Bartley 1995; Bartley/Foley 1994; Bartley/Jacobs 2000; Beek et al 1987; Bois 1934; Boisvert/Huber 2000; Burkill 5, 2000; Chen/Ho 1988; Chen et al. 1986; Connell 1970; Connell/Jordan 1971; Craze 2002; Dake 1995; Dalby 2000; Das/Sarma 2001; Davidson 1999; Dudtschenko et al. 1989; Duke et al. 2003; Erler et al. 1988; Falch 1997; Farrell 1985; Ferrão 1992; Germer/Franz 1997; Gopalam/Ratnambal 1989; Govindarajan 1982a; Goyal/Korla 1997; Gurib-Fakim et al. 2002; Guzman/Siemonsma 1999; Hanelt 2001; Hartmann/Köstner 1994; Herklots 1972; Herrmann 1999; Hiller/Melzig 1999; Hohmann et al. 2001; Hoppe 1949; Hutton 1998; lee et al. 1986; Jansen 1981; Jia-Jiu/Jui-Sen 1994; Jung-Hye Shin et al. 2002; Kang-jin Cho et al. 2001; Kikuzaki et al. 1992; Kim et al. 1996; Krishnamurthy et al. 1977; Kumar 2001; Larkcom 1991; Larsen et al. 1999; Lawrence/Reynolds 1984; Leverington 1975; Macleod/Pieris 1984; Magda 1993; Mascolo et al. 1989; Maistre 1964; Mazza/Oham 2000; Melchior/Kastner 1974; Miyazawa/Kameoka 1988; Morris/Mackley 1999; Nair et al. 1982; Narasinga Rao (no year); Natarajan et al. 1972; Newall et al. 1996; Nishimura 1995; Norman 1991; Onyenekwe/Hashimoto 1999; Opdyke 1974c; Pérez-Gálvez/Mínguez-Mosquera 2001; Pe-

ter 2001; Pochljobkin 1974, 1977; Pruthi 1976; Pschyrembel 1998; Rosengarten 1969; Roth/Kormann 1997; Sakawura 1987; Schenck/Naundorf 1966; Schröder 1991; Schuhbaum/Franz 2000; Schultze-Motel 1986; Seidemann 1993c; Seidemann/Siebert 1987; Selbitschka 1991; Sharma 2003; Sharpnel 1967; Siewek 1990; Small 1997; Smith 1981; Staesche 1972; Steinegger/Stück 1982; Täufel et al. 1993; Teuscher 2003; Thode-Sonntag/Thode-Sonntag 1988; Tomlinson 1956; Uphof 1968; Vaupel 2002b; Villamar et al. 1974; Wagner 1992; Westermann 1909; WHO 1990; Wiersema/León 1999; Winterton/Richardson 1965; Wong 1999; Wu 1985; Wüstenfeld/Haensel 1964; Wyk et al. 2004; Yajing Shao et al. 2003; Yusuf et al. 2002; Zarate/Yeoman 1994; Zeven/de Wet 1982; Zhang et al. 1994, 2001

### **Zingiber purpureum** *Rosc.*

➤ *Zingiber cassumunar* *Roxb.*

### **Zingiber spectabile** (*Griffith*) *Not.*

**Common Names** ▶ black gingerwort, nodding ginger;

*German:* Ansehlicher Ingwer, Nickender Ingwer;

*Malaysian:* tepai, tepus halia, tepus tanah; *Thai:* changoe, dakngoe;

**Usage** ▶ flavoring (locally in Malaysia)

**Parts Used** ▶ rhizome

**Distribution** ▶ Malaysian Peninsula, Thai Peninsula

Erhardt et al. 2002; Guzman/Siemonsma 1999; Holttum 1950; Larsen et al. 1999; Wong 1999

### **Zingiber xanthorrhizum** *Moon*

➤ *Boesenbergia rotunda* (*L.*) *Mansf.*

### **Zingiber zerumbet** (*L.*) *Rosc. ex Sm.*

**Synonyms** ▶ *Amomum sylvestre* Lam., *Amomum zerumbet* L., *Zingiber amaricans* Bl., *Zingiber blancai* Hassk., *Zingiber littorale* Val.

**Common Names** ▶ wild ginger, zerumbet ginger; *American:* shampoo ginger; *French:* gingembre fou, gingerbre blanc; *German:* Bitterer Ingwer; *Indonesian:* lampuyang; *Japanese:* hana-shôga; *Malaysian:* lampoyang, mpojang, noronha; *Pilipino:* barik, langkawas, lampuyang; *Portuguese:* gen-



 **Zingiber zerumbet, flowering**

gibre-amargo; *Spanish* jengibre amargo; *Thai:* kathue, kathue-pa, kawaen

**Usage** ▶ spice

**Parts Used** ▶ rhizome

**Distribution** ▶ SE Asia; probably indigenous to India, cultivated in India, Sri Lanka and China

**Note** ▶ In Java var. *amaricans* (Bl.) Theilade occurs wild and cultivated, var. *aromaticum* (Val.) Theilade is found cultivated and sometimes wild or native, whereas var. *zerumbet* is only known cultivated.

Arona/Pandey 1996; Bois 1934; Dalby 2000; Davidson 1999; Erhardt et al. 2002; Guzman/Siemonsma 1999; Holttum 1950; Kumar 2001, 2003; Larsen et al. 1999; Melchior/Kastner 1974; Schultze-Motel 1986; Seidemann 1993a, c; Seidemann/Siebert 1987; Shiobara et al. 1986; Staesche 1972; Täufel et al. 1993; Teuscher 2003; Uphof 1968; Wiersema/León 1999; Wong 1999; Wüstenfeld/Haensel 1964; Yusuf et al. 2002; Zeven/de Wet 1982

### **Zingiber zingiber** *Karst.*

➤ *Zingiber officinale* *Rosc.*

## ZIZIPHORA L. - Lamiaceae (Labiatae)

### *Ziziphora pulegioides* (L.) Desf.

➤ *Hedeoma pulegioides* (L.) Pers.

### *Ziziphora tenuior* L.

**Common Names** ▶ *German*: Judendorn; *Russian*: zizi-  
fora

**Usage** ▶ spice (flavoring) in Turkey for yoghurt

**Parts Used** ▶ leaf

**Distribution** ▶ C Asia: Turkey (Anatolia)

Dudtschenko et al. 1989; Hanelt 2001; Kulakovskaya 1976; Maberly 1997; Sezik et al. 1991; Uphof 1968

## ZOSTERA L. - Eelgrass - Zosteraceae (Potamogetonaceae)

### *Zostera marina* L.

**Synonyms** ▶ *Alga marina* Lam. *Zostera maritima*  
Gaertn.

**Common Names** ▶ eel grass, grass wrack; *Chinese*: hai dai;  
*French*: zostère marine; *German*: Gewöhnliches  
Seegras, Schmalblättriges Seegrass; *Italian*: alga  
marina, aliga, allego; *Japanese*: ama-mo; *Russian*:  
trawa morskaja, sosterka; *Spanish*: hierba marina

**Usage** ▶ spice of meat of the Seri-Indian

**Parts Used** ▶ root

**Distribution** ▶ N Atlantic and N Pacific coasts

Duke/Ayensu 1985; Erhardt et al. 20002; Fleischhauer 2003; Hanelt  
2001; Schnelle 1999; Seidemann 1993c; Täufel et al. 1993; Uphof  
1968

### *Zostera maritima* Gaertn.

➤ *Zostera marina* L.

## ZYGOPHYLLUM L. - Zygophyllaceae

### *Zygophyllum coccineum* L.

**Common Names** ▶ Arabian pepper; *French*: poivre les  
Arabes; *German*: Arabischer Pfeffer

**Usage** ▶ spice (rarely)

**Parts Used** ▶ seed

**Distribution** ▶ N Africa, Arabia

Bois 1934

### *Zygophyllum tridentatum* Sesse et Moç.

➤ *Larrea tridentata* (Sesse et Moç.) ex DC. Cav.

### *Zygophyllum fabago* L.

**Common Names** ▶ bean caper, Syrian bean caper; *French*:  
fabagelle; *German*: Bohnenkaper; *Russian*: parno-  
listnik

**Usage** ▶ condiment

**Parts Used** ▶ flower bud

**Note** ▶ Substitute for capers (*Capparis spinosa* L.)

**Distribution** ▶ Caucasus, C and W Asia, India, E and SE  
Europe, native elsewhere

Dudtschenko et al. 1989; Hanelt 2001; Hiller/Melzig 1999; Rättsch  
1998; Schultze-Motel 1986; Wiersema/León 1999