## Agrimonia

Family Rosaceae

Temperature

English (common) agrimony = A. eupatoria, fragrant agrimony = A. proceraBotanical name Agrimonia eupatoria L., A. proceraWallr.Pharmaceutical name Agrimoniae herbaPart dried aerial partsMandarin A. eupatoria is not used in Chinese medicine;xiān hè căo (仙鹤草) is the aerial parts of A. pilosa Ledeb.

A hardy perennial, up to 1 m tall. Leaves are dark green above and grayish and downy below, with basal leaves in a rosette and smaller leaves up the stem. Yellow flowers in terminal spikes. Both flowers and leaves have a faint characteristic lemony scent when crushed. Fruits are small clinging burrs, which can stick to clothing. Native to the Northern hemisphere, its natural habitat is woods and fields.

# Tastessour-astringent, sl. bitterOrgansIN, ST, SP, LR, GB, KI, BL

neutral

## Actions, uses, and herb pairs



Chinese actions (Western actions)		Western uses	<b>Pair examples</b> (disorders)
I.	<b>tonify Spleen, astringe Intestines</b> (bitter tonic, astringent, anti-inflammatory)	malabsorption and malnutrition due to intestinal hyperpermeability (leaky-gut syndrome), gastroenteritis	<b>Agrimonia + Gentiana</b> leaky gut and weak digestion
		diabetic hyperglycemia + malabsorption	<b>Agrimonia + Urtica</b> diabetic hyperglycemia
11.	<b>astringe Intestines, reduce diarrhea and bleeding</b> (astringent, antihemorrhagic, anticatarrhal)	diarrhea, mucous colitis, diarrhea with bleeding	<b>Agrimonia + Urtica</b> mucous colitis
	(2001.1.901.0, 2001.001.001.000, 2002.000, 2002.000, 200		<b>Agrimonia + Plantago</b> blood in stools
III.	<b>tonify and regulate Liver</b> (hepatic tonic, hepatoprotective, cholagogue)	hepatic weakness and congestion, with jaundice, cholecystitis, or hepatitis B	<b>Agrimonia + Silybum</b> weak digestion and reduced hepatic function
IV.	move Stagnant Qi and clear Damp and Phlegm in Kidney-Bladder (anti-inflammatory, anticatarrhal, alterative)	urinary incontinence, urinary tract inflam- mation, urinary dribbling, gout, porphyria	<b>Agrimonia + Equisetum</b> (urinary incontinence)
			<b>Agrimonia + Thuja</b> (urinary tract inflammation)

USE OF DIFFERENT TYPES AND PLANT PARTS Felter and Lloyd² described the use of the whole plant of Agrimonia eupa-

## Traditional use in China

xīan hè cǎo, the aerial parts of A. pilosa Ledeb., is used to<sup>1</sup>:

• reduce bleeding in epistaxis, hemoptysis, bleeding gums,

toria, and Ellingwood<sup>3</sup> referred to the use of the pulverized leaves. Moore uses the whole plant of A. striata or A. gryposepala<sup>4</sup>.

hematemesis, melena, hematuria, and abnormal uterine bleeding

- reduce diarrhea
- kill parasites in malaria, and topically for trichomonas vaginitis

## Traditional use in the West

CULPEPER (1651)<sup>5</sup>

## Liver

- for those whose livers are annoyed either by heat or by cold
- the liver forms the blood, the blood nourishes the body, and agrimony strengthens the liver
- opens and cleanses the liver (and) treats jaundice

**Intestines** very beneficial to the bowels, healing all inward wounds; for stopping bloody diarrhea

**Kidneys and bladder** for treating those (people) with foul, troubled, or bloody urine; for treating gout

## Other

- treats tertian or quartan agues (malaria)
- (topically) for sores and ulcers

## FELTER AND LLOYD (1898)<sup>2</sup>

**Mucous membranes** a mild tonic, alterative, and astringent; reduces excess mucous (secretion) and gives tone to mucous membranes

**Urinary system** for chronic genito-urinary catarrhal states; for muddy, ill-smelling urine and dirty-looking skin; for renal congestion; for cystitis, nephritis; for cough with dribbling or expulsion of urine; for urinary gravel

Specific for deep-seated and colicky pain in the lumbar region with uneasy sensations reaching from the kidneys to the hips and umbilicus (renal colic).

## Comparison with a similar herb

AGRIMONIA AND POTENTILLA ERECTA

**Similarities** Both are astringent, antihemorrhagic, bitter herbs, that can treat diarrhea, colitis, and intestinal bleeding.

## Differences

Potentilla erecta

- has a higher tannin content (15-20%) than Agrimonia (3-13%), and is a stronger astringent and antihemorrhagic than Agrimonia
- is generally used short-term, for more severe acute cases of diarrhea or bleeding, while Agrimonia is used longerterm for children's diarrhea, and for milder or more chronic cases of diarrhea and intestinal bleeding
- is more effective than Agrimonia for treating bleeding hemorrhoids or prolapsed anus

*Agrimonia* In contrast to Potentilla, Agrimonia is also used as:

- mild astringent and mucous membrane tonic for:
  - 'leaky-gut syndrome' and malabsorption

- mucous colitis
- urinary tract catarrh
- mild bitter tonic for digestive weakness
- mild bitter tonic for hepatic weakness

## Constituents and pharmacology

#### TYPES OF CONSTITUENTS<sup>6</sup>

- tannins (3-13% in A. eupatoria)
- **flavonoids** (ca. 1.9%) mainly hyperoside (0.37%), also rutin, isoquercitrin, quercitrin, luteolin, apigenin
- triterpenoids ursolic acid (0.6%)
- **phenylpropanoids** (phenolic acids) including chlorogenic, caffeic, and ellagic acids
- **minerals** (ca. 7% in A. eupatoria) with relatively high silica content

#### ACTIONS SUPPORTED BY RESEARCH

The following actions have been reported for Agrimonia plant material or for its isolated constituents:

antiviral (to hepatitis B)<sup>7</sup>, anti-inflammatory<sup>8</sup>, antioxidant<sup>8</sup>, hepatoprotective<sup>9</sup>, cholagogic<sup>6</sup>, uricosuric<sup>6</sup>, for cutaneous porphyria<sup>6</sup>, antihyperglycemic<sup>10</sup>, antiplatelet<sup>11</sup>, and antitumor<sup>12</sup>

#### ACTIONS LINKED TO A CONSTITUENT

- anti-inflammatory polyphenols (suggested)<sup>13</sup>
- **hepatoprotective** luteolin (flavonoid)<sup>14</sup>, agrimonolide (ellagic acid glycoside = an isocoumarin)<sup>9</sup>
- antitumor agrimoniin (tannin)<sup>12</sup>

## Dose and dispensing

DRIED HERB  $2\text{-}4\,\text{g}$  of dried herb, as powder or as infusion, three times per day (BHP)^{15}.

TINCTURE 2-5 ml of 1:5 tincture in 25% alcohol, three times per day (JR).

LIQUID EXTRACT  $\,$  1-3 ml of 1:1 liquid extract in 25% alcohol, three times per day (BHC2)^6.

INITIAL DOSE Can start at the standard dose (JR).

DURATION No restriction (JR).

## Cautions

GENERAL CONTRAINDICATIONS None known (BHC2).

Please read discussion on safety concerns with tannin-containing herbs in Potentilla chapter in 'Combining'<sup>16</sup>.

CHINESE CONTRAINDICATIONS A. eupatoria is not used in Chinese medicine.

PREGNANCY AND LACTATION No data available (JR).

SIDE EFFECTS None known (BHC2).

OVERDOSE No data available (JR).

 $DRUG\ INTERACTIONS \quad None\ reported\ (Comm.\ E)^{17}.$