



## COMMITTEE FOR VETERINARY MEDICINAL PRODUCTS

### AGNUS CASTUS

### SUMMARY REPORT

1. *Agnus castus* (synonyms: Monks' pepper, chaste tree) is a plant of the family *Verbenaceae*. In veterinary homeopathy *Agnus castus* is used as mother tincture prepared by ethanolic extraction of dried fruits of *Vitex agnus-castus* L. according to homeopathic pharmacopoeias, and dilutions thereof. The major constituents of *Agnus castus* fruits are iridoid glycosides like aucubin, agnuside and 10-(p-coumaroyl) aucubin. Flavonoids, predominantly casticin (quercetagenin-3,6,7,4'-tetramethyl ether) as well as the 3,6,7,4'-tetramethyl ether of 6-hydroxykaempferol, the 3,6,7-trimethyl ether of 6-hydroxykaempferol (penduletin) and the 3,6,7-trimethyl ether of quercetagenin are also present. The content of essential oils in the ripe fruits is 0.8 to 1.2%. The oils contain monoterpenes and sesquiterpenes: the most abundant components were reported as sabinene, limonene, 1,8-cineole,  $\alpha$ -pinene,  $\beta$ -pinene,  $\alpha$ -terpineol, terpinene-4-ol,  $\beta$ -caryophyllene,  $\alpha$ -humulene, cis- $\beta$ -farnesene and scadinol. Further constituents are free and esterified fatty acids.
2. *Agnus castus* is intended for use in all food-producing animals. The use follows the principles of homeopathic therapy where animals are diagnosed on basis of the individual pattern of clinical signs. The recommended maximum parenteral dose is 10 ml/animal. Corresponding doses in form of tablets, globules or drops are reported to contain lower amounts of *Agnus castus* than the injectable form. Treatment may be repeated but a fixed dose schedule is not common in homeopathy.

*Agnus castus* is also used in human homeopathy as the mother tincture as well as in lower concentrations. In human phytotherapy, the drug (dried fruits of *Vitex agnus-castus*) is used for treatment of mastodynia and symptoms related to female cycle disorders. *Agnus castus* extracts have been reported to elucidate a dopaminergic inhibition of prolactin synthesis and/or release. In phytotherapy, usual recommended daily oral doses of aqueous-ethanolic extracts are corresponding to 30 to 40 mg of dried fruits. In traditional medicine, *Agnus castus* fruits were used as infusions or fluid extracts (10 g fruit material/100 ml or 1 to 2 g fluid extracts/day).

3. In a preliminary risk evaluation procedure by the Committee for Veterinary Medicinal Products (CVMP) considering all defended old substances used in veterinary homeopathy in concentrations greater than 1:10 000, the use of *Agnus castus* and its individual constituents was considered as not giving rise to specific health concern. Further information made available and extensive search of published literature did not provide any further evidence for pharmacological or toxicological properties of *Agnus castus* alerting to specific health risks which may result from residues in food producing animals following the intended uses. Special emphasis was put on identification of suspicion pointing to genotoxicity or other potential of serious health effects of plant constituents.

## Conclusions and recommendation

Having considered the criteria laid down by the Committee for Veterinary Medicinal Products for the inclusion of substances in Annex II of Council Regulation (EEC) No 2377/90 and in particular that:

- *Agnus castus* is used in a small number of individual animals and for non-regular treatments only,
- animals are unlikely to be sent for slaughter during or immediately after treatment,
- the substance and individual constituents thereof do not give rise to specific consumer health concern which may result from the use in veterinary homeopathy;

the Committee for Veterinary Medicinal Products concludes that there is no need to establish an MRL for any plant constituents following homeopathic use of *Agnus castus* and recommends its inclusion in Annex II of Council Regulation (EEC) No 2377/90 in accordance with the following table:

Pharmacologically active substance(s)	Animal species	Other provisions
<i>Agnus castus</i>	All food producing species	For use in homeopathic veterinary medicinal products prepared according to homeopathic pharmacopoeias at concentrations corresponding to the mother tincture and dilutions thereof only