



COMMITTEE FOR VETERINARY MEDICINAL PRODUCTS

MATRICARIA RECUTITA

SUMMARY REPORT

1. *Matricaria recutita* (synonym *Chamomilla recutita*) is a ubiquitous plant on European pastures. Mainly the dried flowerheads, *Matricariae flos* (Chamomilla) are used in veterinary phytotherapy, but preparations of other aerial parts and the roots of the plant are employed in veterinary homeopathy. The dried flowers contain approximately 0.1% cumarins (umbelliferon and its methyl ether, herniarin), flavonoids and 0.25 to 1.9% volatile oils containing mainly bisabolol (up to 50%) and chamazulen (up to 15%) as well as their oxidation products such as bisabololoxide A, B; and C or bisabolonoxide A, as well as sesquiterpenes such as *trans*- β -farnesene, *trans*- α -farnesene and proazulenes, the spiroethers *trans* ene-yne-dicycloether and *cis* ene-yne-dicycloether. Stigmasterol and stigmasterol-3-glucoside were also found in the aerial parts. The roots are reported to contain much lower amounts of essential oils and the characteristic components chamazulen and bisabolol are not found in roots. The essential oil of *Matricaria recutita* roots include *trans*- β -farnesene, *trans*- α -farnesene, chamillaester I and II, *trans* ene-yne-dicycloether, and the sesquiterpene-alcohol chamomillol, further, β -caryophyllene, *cis*-caryophyllene and caryophyllene epoxide.
2. *Matricariae flos* is typically used in veterinary medicinal products as solution and ointment in combination with other herbal extracts or tinctures for treatment of skin lesions, eczema and inflammations. The fluid extracts for solutions and ointments are prepared with ethanol 45%, the tinctures are prepared with 70% isopropanol. The medicinal products contain between 2.5% and 30% (w/w) of these preparations and are applied 1 to 2 times daily to the damaged skin area for up to a week. This medicinal use of *Matricaria recutita* has previously been considered by the CVMP and *Matricariae flos* is included in Annex II of Council Regulation (EEC) No 2377/90.

In veterinary homeopathy the mother tincture prepared according to homeopathic pharmacopoeias by ethanolic extraction of the fresh flowers, but also of the aerial parts of the plant or the roots of *Matricaria recutita* is intended for use in all food-producing animals. The recommended maximum dose for large animals is 10 ml/animal for parenteral administration. The use follows the principles of homeopathic therapy and animals are diagnosed on basis of the individual pattern of clinical signs. Treatment may be repeated but a fixed dose schedule is not common in homeopathy.
3. The dried flowers are used as herbal infusions, fluid extracts and tinctures in human traditional medicine. The normal dose for human use is 2 to 8 g of dried flowerheads, or infusion or as alcoholic liquid extract 1:1, 1 to 4 ml three times daily. The mother tincture of *Matricaria recutita* and dilutions thereof are also used in human homeopathy.
3. The dried flowerheads of *Matricaria recutita* are also used for the preparation of teas and therefore it can be concluded that the normal human diet already contains *Matricariae flos*.
4. *Matricaria recutita* is ubiquitous constituent of grassland populations and may be expected to be ingested by grazing food producing animals in small amounts on a regular basis in green forage, hay or silage.

Conclusions and recommendation

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

- the dried flowerheads of *Matricaria recutita* are considered as a normal component of the human diet,
- *Matricaria recutita* as a ubiquitous constituent of grassland population is considered a normal component of the feed of food producing animals in small amounts,
- *Matricaria recutita* is used for infrequent and non-regular treatment of a small number of individual animals only;

the Committee concludes that there is no need to establish maximum residue limits for *Matricaria recutita* and recommends the modification of the inclusion in Annex II to Council Regulation (EEC) No 2377/90 for *Matricariae flos* in accordance with the following table:

Pharmacologically active substance(s)	Animal species	Other provisions
<i>Matricaria recutita</i> and preparations thereof	All food producing species	