



COMMITTEE FOR VETERINARY MEDICINAL PRODUCTS

LOBARIA PULMONARIA

SUMMARY REPORT

1. *Lobaria pulmonaria* L. (synonym: oak lungs) is a lichen of the *Stictaceae* family. *Lobaria pulmonaria* grows as an epiphyte on various broad-leaved trees, mainly in mountain regions of Europe, North America, Africa and Australia. The homeopathic mother tincture is prepared according to homeopathic pharmacopoeias by ethanolic extraction of the whole dried lichen thallus.

Lobaria pulmonaria contains various organic lichen acids such as stictic acid (3%), desmethyl stictic acid, gyrophoric acid, and tenuiorin. Other constituents are sugar alcohols such as D-arabitol and the unusual volemitol (D-glycero-D-manno-heptitol), as well as several carotenoids such as α -carotene, β -carotene, β -cryptoxanthin and others (the total content of carotenoids was estimated with more than 10 mg/kg). Mucous substances and tannins were also found. The ash contains mainly phosphorus, sulphur, boron, and manganese.

2. In veterinary homeopathy the mother tincture intended for oral or parenteral use in all food-producing species. 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 for large animals is 10 ml/animal. Corresponding doses in form of tablets, globules or drops are reported to contain lower amounts than the injectable form. Treatment may be repeated but a fixed dose schedule is not common in homeopathy.

The plant is also used in human homeopathy as the mother tincture as well as in lower concentrations. The drug has been used in traditional medicine for treatment of lung diseases. Information on doses was not available.

3. In a preliminary risk evaluation procedure by the Committee for Veterinary Medicinal Products, considering all defended old substances used in veterinary homeopathy in concentrations greater than 1:10 000, the use of *Lobaria pulmonaria* and its individual constituents was considered as not giving rise to specific health concerns. Further information made available and systematic search of published literature did not provide any further evidence for pharmacological or toxicological properties of *Lobaria pulmonaria* or related members of the *Stictaceae* family and their constituents 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:

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

the Committee for Veterinary Medicinal Products concludes that there is no need to establish an MRL for any constituents of *Lobaria pulmonaria* following homeopathic uses and recommends its inclusion in Annex II of Council Regulation (EEC) No 2377/90 as follows:

Pharmacologically active substance(s)	Animal species	Other provisions
<i>Lobaria pulmonaria</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