

Misc

313/05 CATROUX, J-B [Marigold, a preventive remedy for honey bee stings.] **Le souci, remède préventif contre les piqûres d'abeilles.** Abeilles & Fleurs (2004) (No.651) 29-30 [Fr, B]]

A homeopathic preparation of Calendula arvensis or C. officinalis taken for 5 or 6 days before opening a hive is claimed to reduce the effects of any stings received by the beekeeper. The flowers or leaves can also be rubbed on the site of a sting.

[P Walker]

1305/05 ORSOLIC, N; KNEZEVIC, A; SVER, L; TERZIC, S; HACKENBERGER, B K; BASIC, I **Influence of honey bee products on transplantable murine tumours.** Veterinary and Comparative Oncology (2003) 1 (4) 216-226 [En, wf] Dept of Animal Physiology, Faculty of Science, Univ. of Zagreb, Rooseveltov trg 6, 10000 Zagreb, Croatia.

A water-soluble derivative from propolis (WSDP), and related polyphenolic compounds, showed significant anti-metastatic effect on murine tumour models (mammary carcinoma and colon carcinoma) when given either before or after tumour-cell inoculation. Oral or systemic application of WSDP or caffeic acid significantly reduced subcutaneous tumour growth and prolonged the survival of mice. Honey also exerted pronounced anti-metastatic effect when applied before tumour-cell inoculation in mice and for rats. Royal jelly did not affect metastasis formation when given intraperitoneally or subcutaneously, but intravenous administration of royal jelly before tumour-cell inoculation significantly inhibited metastasis formation. When mice were given tumour cells intravenously immediately after bee venom injection, the number of tumour nodules in the lung was significantly lower than in untreated mice or mice treated with bee venom subcutaneously. Local presence of bee venom in the tissue caused significant delay in subcutaneous tumour formation. These findings clearly demonstrate that anti-tumour and anti-metastatic effects of bee venom are highly dependent on the route of injection and on close contact between components of the bee venom and tumour cells. These data show that honey bee products given orally or systematically may have an important role in the control of tumour growth and tumour metastasizing ability.

1225/04 ORSOLI, N; SVER, L; VERSTOVSEK, S; TERZIC, S; BASIC, I **Inhibition of mammary carcinoma cell proliferation in vitro and tumour growth in vivo by bee venom.** Toxicon (2003) 41 (7) 861-870 [En, wf] Dept of Animal Physiology, Faculty of Science, Univ. of Zagreb, Rooseveltov trg 6, 10000 Zagreb, Croatia.

The tumour used in this study was a transplantable mammary carcinoma (MCa) of CBA mouse. Intravenous administration of bee venom to the mice significantly reduced the number of metastases in the lung. However, subcutaneous administration did not. In vitro studies on MCa cells confirmed that close contact between the components of the venom and the tumour cells was necessary for inhibition. It is suggested that bee venom has an indirect mechanism of tumour growth inhibition and promotion of tumour rejection that is based on stimulation of the local cellular immune responses in lymph nodes. Apoptosis, necrosis and lysis of tumour cells are other possible mechanisms by which bee venom inhibits tumour growth.