Royal Jelly

308/05 BAUMGRATZ, L L; MARCHINI, L C; MORETI, A C DE C C [The effect of larval age of Africanized bees (Apis mellifera L., 1758) on the royal jelly production in mini-hives.] **Efeito da idade das larvas de abelhas africanizadas (Apis mellifera L., 1758) sobre a produção de geléia real em mini-recrias.** Revista de Agricultura (Piracicaba) (2003) **78** (1) 113-127 [Pt, en, wf] Departamento de Entomologia, Fitopatologia e Zoologia Agricola, ESALQ/USP, CP 09, 13418-900, Piracicaba, SP, Brazil.

Three mini hives with superimposed nuclei were set up, and larvae aged 0-24h and 24-48h were transferred; acceptance rate, royal jelly production was highest if it was collected 3d after transfer of the younger larvae (0-24h).

321/05 KRIDLI, R T; HUSEIN, M Q; HUMPHREY, W D **Effect of royal jelly and GnRH on the estrus synchronization and pregnancy rate in ewes using intravaginal sponges.** Small Ruminant Research (2003) **49** (1) 25-30 [En, X] Faculty of Agriculture, Jordan Univ. of Science and Technology, P.O.Box 3030, Irbid 22110, Jordan.

The results of this study demonstrate that royal jelly treatment in conjunction with a source of exogenous progesterone can be used to induce oestrus and increase first service conception rate in sheep.

337/05 MORAES, F C Y DE; NOGUEIRA COUTO, R H [Alternative sources of protein utilization for royal jelly production in apis mellifera.] **Utilização de fonts proteicas alternatives visando produção de geleia real em colmeias de Apis mellifera.** Ecossistema (2000) **25** (2) 184-187 [Pt, en, X] Zootecnista graduado pela Faculdade de Ciências Agrárias e Veterinárias de Jaboticabal FCAV, UNESP, 14.870-000, Jaboticabal (SP), Brazil.

Royal jelly production in colonies was increased by feeding them every 3 d with a diet of soya protein (18.8%) and rice meal (81.2%).

351/05 SIMÚTH, J; BILIKOVÁ, K **[Potential contribution of royal jelly proteins for health].** Honeybee Science (2004) **25** (2) 53-62 [Ja, en, Bj] Lab. Of Genetic Engineering, Inst. Of Chemistry, Slovak Academy of Sciences, Dúbravská cesta 9, SK-84538 Bratislava, Slovakia.

A review of the composition and properties of royal jelly.

1670/05 KIMURA, Y; TAKAKU, T; OKUDA, H **Antitumor and antimetastatic actions by royal jelly in Lewis lung carcinoma-bearing mice.** Journal of Traditional Medicines (2003) **20** (5) 195-200 [En, ja, X] Second Dept of Medical Biochemistry, School of Medicine, Ehime Univ., Shigenobu-cho, Onsen-gun, Ehime 791-0295, Japan.

Royal jelly (RJ) at a dose of 300 or 600 mg/kg significantly reduced the tumour weight and metastasis in liver of mice implanted intrasplenically with highly metastatic Lewis lung carcinoma tumours. Mice were then subcutaneously inoculated with Matrigel supplemented with acidic fibroblast growth factor and heparin in the presence or absence of RJ. RJ inhibited angiogenesis. From these results, it seems likely that the antitumour and antimetastatic activities of royal jelly may be partly due to the inhibition of angiogenesis.

1219/04 INOUE, S; KOYA MIYATA, S; USHIO, S; IWAKI, K; IKEDA, M; KURIMOTO, M **Royal jelly prolongs the life span of C3H/HeJ mice: correlation with reduced DNA damage.** Experimental Gerontology (2003) **38** (9) 965-969 [En, X] Fujisaki Inst., Hayashibara Biochemical Labs, Inc., 675-1 Fujisaki, Okayama 702-8006, Japan.

The results indicated that dietary royal jelly increased the average life span of C3H/HeJ mice, possibly through the mechanism of reduced oxidative damage.

1816/05 TOKUNAGA, K; SUZUKI, K; YOSHIDA, C; MARUYAMA, H; FUTAMURA, Y; ARAKI, Y; MISHIMA, S **[Effect of royal jelly treated with protease on blood pressure in spontaneously hypertensive rats].** *Nippon shokuhin Kagaku Kogaku Kaishi (journal of the Japanese Society for Food Science and Technology)* (2003) **50** (10) 457-462 [Ja, en, X] API Company ltd Research Inst., 4-23 Shinhon-machi, Kanoh, Gifu, 500-8463, Japan.

Spontaneously hypertensive rats were given an oral dose of protease-digested royal jelly (ProR) at 10 mg/kg/d for 28 d. Their systolic blood pressure was significantly lower than that of controls. The blood pressure of normotensive rats was not affected by repeated administration of ProRJ. However, oral administration of royal jelly peptides (10mg/kg/d) for 28 d significantly reduced systolic blood pressure. These results suggest that the hypotensive effect of ProRJ is correlated with the angiotensin I-converting enzyme inhibitory activity of these peptides, and that ProRJ would be beneficial for improving blood pressure in hypertension.