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1．胰腺损伤修复的治疗方法

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前沿资讯

1. UK JOINS 'TEA MASTERS CUP'（英国加入“茶大师杯”）

简介：The United Kingdom, a country that has made an invaluable contribution to the development of the global tea market and world tea culture, joins the Tea Masters Cup international system of championships. In accordance with the signed agreement, the United Kingdom Tea & Infusions Association (UKTIA), uniting the largest British tea market operators, becomes the national coordinator of the Tea Masters Cup project in the UK and will launch their competition in 2020.

来源：UK Tea and Infusions Association 网站

发布日期:2019-07-01

全文链接:http://agri.ckcest.cn/file1/M00/00/00/Csgk0V0i6byASNBMAAXDHMQE6J0321.pdf

学术文献

1. An integrated assessment and spatial-temporal variation analysis of neonicotinoids in pollen and honey from noncrop plants in Zhejiang, China（浙江省非农作物花粉和蜂蜜中新烟碱类化合物的综合评价及时空变化分析）

简介：Recent studies have shown that neonicotinoids in pollen and honey (collected by honeybees) are likely to pose risks to honeybees. However, data on the integrated residue and spatial-temporal variation of neonicotinoids from noncrop plants, the principle sources of pollen for honey bees, are very limited, especially in China. In this study, we employed a novel assessment method based on the relative potency factor to calculate the integrated residue of seven neonicotinoids in pollen and honey samples collected from noncrop plants in 12 stations of Zhejiang province in three consecutive months. The integrated concentration of neonicotinoids (IMIRPF) ranged from no detected (ND) to 34.93 ng/g in pollen and ND to 8.51 ng/g in honey. Acetamiprid showed the highest detection frequency of 41.7%, followed by clothianidin (33.3%) and dinotefuran (22.2%). The highest IMIRPF occurred in April for stations in the fringe areas of Zhejiang province, whereas for stations in the central areas of Zhejiang province, the IMIRPF in May was relatively higher than the other two months. In terms of spatial change, the pollution variation of pollen samples in Lin'an—Tonglu—Pujiang was relative highly polluted—lightly polluted—highly polluted. For honey samples, spatial variation showed a single trend, and peak values were found in Wenzhou, which may be attributed to the local climate and farming practices. This fundamental information will be helpful to understand the effects of neonicotinoids on honeybees foraging habits.

来源：Environmental Pollution 期刊

发布日期:2019-07-20

全文链接:http://agri.ckcest.cn/file1/M00/06/88/Csgk0F0jAsSAN6gZABw5oUWdbAE318.pdf

2 . Green tea polyphenol treatment is chondroprotective, antiinflammatory and palliative in a mouseposttraumatic osteoarthritis model（绿茶多酚治疗在小鼠创伤后骨关节炎模拟中具有软骨保护、抗炎和缓解作用）

简介：INTRODUCTION: Epigallocatechin 3-gallate (EGCG), a polyphenol present in green tea, was shown to exert chondroprotective effects *in vitro*. In this study, we used a post-traumatic osteoarthritis (OA) mouse model to test whether EGCG could slow the progression of OA and relieve OA-associated pain.

METHODS: C57BL/6 mice were subjected to surgical destabilization of the medial meniscus (DMM) or sham surgery. EGCG (25 mg/kg) or vehicle control was administered daily for four or eight weeks by intraperitoneal injection starting on the day of surgery. OA severity was evaluated by Safranin O staining and Osteoarthritis Research Society International (OARSI) score, and by immunohistochemical analysis to detect cleaved aggrecan and type II collagen, and expression of proteolytic enzymes matrix metalloproteinase (MMP)-13 and A Disintegrin And Metalloproteinase with Thrombospondin Motifs (ADAMTS5). Real-time polymerase chain reaction (PCR) was performed to characterize the expression of genes critical for articular cartilage homeostasis. During the course of the experiments, tactile sensitivity testing (von Frey test) and open field assays were used to evaluate pain behaviors associated with OA, and expression of pain expression markers and inflammatory cytokines in the dorsal root ganglion (DRG) were determined by real-time PCR.

RESULTS: Four and eight weeks after DMM surgery, the cartilage in EGCG-treated mice exhibited less Safranin O loss and cartilage erosion, and lower OARSI scores compared to vehicle-treated controls, which was associated with reduced staining for aggrecan and type II collagen cleavage epitopes, and reduced staining for MMP-13 and ADAMTS5 in the articular cartilage. Articular cartilage in the EGCG-treated mice also exhibited reduced levels of *Mmp1*, *Mmp3*, *Mmp8*, *Mmp13*, *Adamts5*, interleukin ((*Il1b*) and tumor necrosis factor (*Tnfa*)-α mRNA and elevated gene expression of the MMP regulator Cbp/p300 Interacting Transactivator 2 (*Cited2*). Compared to vehicle controls, mice treated with EGCG exhibited reduced OA-associated pain, as indicated by higher locomotor behavior (i.e. distance traveled). Moreover, expression of chemokine receptor (*Ccr2*), and pro-inflammatory cytokines *Il1b* and *Tnfa* in the DRG were significantly reduced to levels similar to sham-operated animals.

CONCLUSIONS: This study provides the first evidence in an OA animal model that EGCG significantly slows OA disease progression and exerts a palliative effect.

来源： Arthritis Research & Therapy 期刊

发布日期: 2014-12-17

全文链接: http://agri.ckcest.cn/file1/M00/06/88/Csgk0F0i9HeASZy-AB9niMn7Y0c769.pdf

3．Effective Extraction Method for Determination of Neonicotinoid Residues in Tea（测定茶叶中新烟碱类残留的有效提取方法）

简介： Sample preparation using an absorbent for removal of polyphenols and a solid-phase extraction (SPE) cartridge for cleanup followed by high-performance liquid chromatography (HPLC) has been investigated for the simultaneous determination of eight neonicotinoid

insecticides (dinotefuran, nitenpyram, thiamethoxam, imidacloprid, clothianidin, imidaclothiz, acetamiprid, and thiacloprid). After tea samples were soaked with water and extracted with acetonitrile, sample extracts were treated with an appropriate amount of polyvinylpolypyrrolidone (PVPP) to effectively remove polyphenols. The treated extract was cleaned up with a Carb-PSA cartridge. Neonicotinoid insecticides were eluted with acetonitrile from the cartridge and dried. The extract was redissolved with methanol/water (1:9, v/v) and analyzed by conventional HPLC coupled with an ultraviolet detector. The recoveries of eight neonicotinoid insecticides in tea samples were 71.4-106.6% at 0.1-1.0 mg kg^{-1} spiked levels. Relative standard deviations were <10% for all of the recovery tests. The established method was simple, effective, and accurate and could be used for monitoring neonicotinoid insecticides in tea.

来源： Journal of Agricultural and Food Chemistry 期刊

发布日期: 2013-12-05

全文链接: http://agri.ckcest.cn/file1/M00/00/00/Csgk0V0jBOOAEAwEABJWpYUPSYs293.pdf

4. Detection of Nicotine in Foods and Plant Materials（食物及植物原料中尼古丁含量的检测）

简介： Nicotine at several ppm was detected in the dehydrated fresh produce of the *Solanaceae* species including tomato, potato peel, eggplant and green pepper. Its identity was verified by GLC, TLC and CC-mass spectrometry. The presence of nicotine in all parts of the tomato plant suggested biosynthetic origin. In contrast, the 2 to 23 ppm nicotine found in green tea and instant tea samples might be attributed to insecticide contamination. There was no detectable level of nicotine in non-*Solanaceae* fruit and vegetables and other processed foods analyzed.

来源： Journal of Food Science 期刊

发布日期: 1988-09-10

全文链接: http://agri.ckcest.cn/file1/M00/00/00/Csgk0V0i_DqARqSpAAQQuIu53tc204.pdf

相关专利

1. Therapeutic method for repairing damaged pancreas（胰腺损伤修复的治疗方法）

简介： 本发明是一种修复受损胰腺的治疗方法。方法包括给药绿茶表没食子儿茶素没食子酸酯(EGCG)和多个脂肪源性干细胞(ADSC)。绿茶中的表没食子儿茶素没食子酸酯(EGCG)能增强脂肪来源的干细胞修复受损组织的能力。

来源： 美国专利

发布日期: 2018-06-14

全文链接: http://agri.ckcest.cn/file1/M00/06/87/Csgk0F0cPxeAZQsUABS8fqoCcto399.pdf