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▶ 前沿资讯

1. Tanzania Bets Big on Tea with Plans for In-country Auction (坦桑尼亚在茶产业大做文章 计划在国内拍卖)

简介: Tanzania, a mid-tier East African tea producer, announced ambitions to significantly increase production and begin laying the groundwork for a regional auction to compete with Kenya's Mombasa Auction, the second largest in the world. The country named five growing regions to target, including Njombe where Unilever Tea Tanzania (Lipton) recently completed a Sh18 billion (\$7.8 million) factory upgrade. The factory buys 70 percent of its green leaf from local smallholders. The remainder is grown on a 1000-acre (400 hectare) estate. The other regions include Iringa, Mbeya, Tanga and Kagera. Tea is cultivated on 56,000 acres (22,721 hectares) with plans to expand to 62,000 acres (25,000 hectares) during the next five years. The tea auction at Mombasa sells, warehouses, and ships most of Africa's tea including 5,000 to 8,000 metric tons of mainly black tea from Tanzania. To succeed, a rival auction in Dar es Salaam must warehouse and ship significant quantities of a variety of tea.

来源: World Tea News 网站

发布日期: 2018-10-30

全文链接: <http://agri.ckcest.cn/file1/M00/02/9C/Csgk0FvufBKAXPoJAAY3J7tNYBs778.pdf>

2. New Test Ensures Tea Transparency (新测试确保茶叶透明度)

简介: 新加坡的创新思维方式在茶叶认证方面创造了潜在的世界节奏。Teapasar是一个初创的在线茶叶市场,于2018年9月推出,其宣布了一套基于技术的工具集,非常适合测试从茶树到杯子物流链上不同事项,透明度日益增长。首先要证明茶叶的来源,类型,收获日期,免于掺假和非假冒都与其声称的完全相同。这项创新并没有在技术或科学方面取得新的突破,而是从经过验证的工具中进行选择,将其打包成具有成本效益的实用组合。所提供的茶系列令人印象深刻,并以各种有趣的口味和混合物为特色。

来源: World Tea News 网站

发布日期: 2018-10-22

全文链接: <http://agri.ckcest.cn/file1/M00/02/9C/Csgk0FvudvOAWwrEAAUevuk6rTs866.pdf>

▶ 学术文献

1. EGCG, a tea polyphenol, as a potential mitigator of hematopoietic radiation injury in mice (茶多酚EGCG对小鼠辐射损伤造血的缓解作用)

简介: Agents capable of providing protection, mitigation or therapy against radiation injuries have long been of interest of radiation biologists owing to the ever expanding application of radiation in our day to day life despite the well reported ill effects of exposure. The current study investigates radiomitigating potential of EGCG (epigallocatechin gallate), a tea polyphenol with known DNMT inhibitory property, in C57 Bl/6 mice model. Treatment with 0.1833 mg/kg body

weight EGCG, 1.5 h post-irradiation to lethally whole body irradiated mice rendered 45% survival for 30 days and also helped restoring the body weight of the animals. An early recovery of various hematological parameters was observed in EGCG treated animals compared to radiation alone group. Significant recovery in the number of bone marrow colony forming cells was observed in EGCG treated irradiated animals. EGCG reduced cytogenetic damage to bone marrow cells in radiation exposed mice significantly as studied by micronucleus assay without any significant affect on cell cycle distribution of the bone marrow cells. ELISA assay with bone marrow cell lysates showed EGCG as an inhibitor of HDAC activity and DNase accessibility assay showed EGCG treatment increased the accessibility of chromatin to the enzyme. The results suggest EGCG provides mitigation against radiation injury to the hemopoietic system of mice and also inhibits HDAC enzyme activity. However, further studies are required to understand its mechanism of action.

来源: Biomedicine & Pharmacotherapy 期刊

发布日期:2017-04-20

全文链接:<http://agri.ckcest.cn/file1/M00/02/9B/Csgk0Fvaq2mADZpOABZHUaY004U683.pdf>

2. The green tea molecule EGCG inhibits Zika virus entry (绿茶分子EGCG抑制Zika病毒进入)

简介: During ZIKV the outbreak in Brazil it was observed an increase of almost 20 times the number of reported cases of microcephaly in newborn babies. There is no vaccine or approved drug available for the treatment and prevention of infections by this virus. EGCG, a polyphenol present in green tea has been shown to have an antiviral activity for many viruses. In view of the need for the development of a drug against a Brazilian strain of ZIKV, we assessed the effect of EGCG on ZIKV entry in Vero E6 cells. The drug was capable of inhibiting the virus entry by at least 1-log (>90%) at higher concentrations (>100 μ M). The pre-treatment of cells with EGCG did not show any effect on virus attachment. This is the first study to demonstrate the effect of EGCG on ZIKV indicating that this drug might be possibility to be used for prevention of Zika virus infections.

来源: Virology 期刊

发布日期:2016-09-20

全文链接:http://agri.ckcest.cn/file1/M00/02/9B/Csgk0Fvan_SABhCdAAg8UbGuDBI756.pdf

3. Conjugation of tea catechins with chitosan nanoparticles (茶儿茶素与壳聚糖纳米粒子的共轭)

简介: The conjugation of tea catechins (+)-catechin (C), (-)-epicatechin gallate (ECG) and (-)-epigallocatechin gallate (EGCG) with chitosan-15 and chitosan-100 kDa nanoparticles was studied in aqueous solution, using multiple spectroscopic methods, thermodynamic analysis and docking. Thermodynamic parameters showed that tea catechins bind nanoparticles via hydrophilic, hydrophobic and H-bonding contacts with larger polyphenols forming more stable conjugates with the order of EGCG > EGC > C. As chitosan size increased, the binding efficacy and stability of polyphenol-polymer adducts were increased. Chitosan nanoparticles are capable of delivery of tea catechins in vitro.

来源: Food Hydrocolloids 期刊

发布日期:2018-11-10

全文链接:<http://agri.ckcest.cn/file1/M00/02/9B/Csgk0FvaZ--AG6nXACa4Q8mmBRs775.pdf>

4. Cancer preventive and therapeutic effects of EGCG, the major polyphenol in green tea (绿茶多酚的主要成分EGCG的癌症预防和治疗作用)

简介: (-)-epigallocatechin-3-gallate (EGCG), the major bioactive catechin in green tea (GT) has been studied for almost past thirty years as an agent initially for its cancer chemoprevention effects and then for its cancer chemotherapeutic ability. This agent has shown considerable anti-cancer effects in a variety of preclinical cell culture and animal model systems. However, its clinical application to human patients is hampered by a variety of reasons that includes its stability and bioavailability. As a result, an increased number of studies assessing the effects derived from the use of EGCG are being employed in combination with other agents or by utilizing innovative carrier settings. Here, we summarize the current understanding of the anticancer effects of EGCG and its effects with other combinations on different kinds of cancers. Further, we also present the available information for the possible mechanism of action of EGCG.

来源: Egyptian Journal of Basic and Applied Sciences 期刊

发布日期:2018-01-20

全文链接:<http://agri.ckcest.cn/file1/M00/02/9B/Csgk0FvaVk-AUYsJADApn2EqOxY929.pdf>