2019年第14期 总167期

茶学研究专题

本期导读

前沿资讯

1．国际茶叶进口商推销和分销 Bitaco茶

2．FDA警告膳食补充剂制造商：必须安全和合法

学术文献

1．玻璃翅神射手昆虫（*Homalodisca vitripennis*）的交配行为和振动模拟

2．第八章　昆虫对声音信号的中枢神经处理

3．第二章　昆虫声学传播的进展

4．果蝇的声音传播

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前沿资讯

1. International Tea Importers to Market and Distribute Bitaco Tea（国际茶叶进口商推销和分销 Bitaco茶）

简介：Commerce City, California-based International Tea Importers (ITI) recently formed a marketing partnership with the Colombia-based supplier Agricola Himalaya, which since November 2016 has been promoting its flagship organic specialty brand Bitaco Tea. Through this co-marketing arrangement the companies agree to distribute a new specialty tea collection across the United States, Canada and Mexico. The Bitaco Tea Estate has been operating in the rural La Cumbre municipality in the foothills of the Andes mountains for nearly 60 years as the only tea grower in Colombia. In 2016, The Bitaco Tea Estate underwent some changes after spending four years doing research and development. The estate converted its tea production from the cut-tear-curl method to orthodox. Bitaco's team learned the best ways of growing and processing white, green and black teas from experts from around the world. Traditional best practices were integrated with the characteristics of Colombia's tropical climate, rich soil and natural spring water to produce top quality teas with the help of expert blenders, tea masters and cuppers.

来源：World Tea News 网站

发布日期:2019-03-26

全文链接:http://agri.ckcest.cn/file1/M00/06/68/Csgk0FyixbOAKy7BAAcKZG40me4673.pdf

2. FDA Warns Dietary Supplement Makers: Be Safe and Legal（FDA警告膳食补充剂制造商：必须安全和合法）

简介：2019年2月，美国食品和药物管理局（FDA）致函12家膳食补充剂公司，警告他们非法销售声称预防或治疗严重疾病（包括阿尔茨海默氏症）的产品，或提供实质性的健康益处，特别是在控制体重方面。FDA在线发布的信件和五个在线咨询将影响绿茶产品的生产、安全、标签和营销。随着科学研究开始证实绿茶抗氧化剂的医学价值，尤其是"神奇物质"表没食子儿茶素没食子酸酯（EGCG），使绿茶越来越受欢迎。虽然绿茶主要作为饮料消费，但补充剂产品的增加速度更快。 FDA公告提出的问题是如何确保药丸和粉末与茶叶一样安全，并要负责任地销售。几十年来，补充剂一直是FDA的监管问题，因为它们作为食品合法销售，因此不符合药品测试和认证的严格要求。但FDA无权测试和证明索赔的准确性。只有在膳食补充剂进入市场后才会作出反应，并在有证据表明存在掺假或造成伤害时采取行动。

来源：World Tea News 网站

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全文链接:http://agri.ckcest.cn/file1/M00/06/68/Csgk0FyiwiSAfPcJAATFeNSrQS8303.pdf

学术文献

1. Mating behavior and vibrational mimicry in the glassy-winged sharpshooter, Homalodisca vitripennis （玻璃翅神射手昆虫

（*Homalodisca vitripennis*）的交配行为和振动模拟）

简介：The glassy-winged sharpshooter (GWSS), *Homalodisca vitripennis*, is an important vector of *Xylella fastidiosa*, the causal agent of Pierce's disease of grapevine. GWSS control relies mainly on insecticides; therefore, an alternative method, such as vibrational mating disruption, is required. However, knowledge of GWSS intraspecific communication is necessary to evaluate applicability of such methods. Mating behavior and associated vibrational signals were described in different social contexts: individuals, pairs, and one female with two competing males. Behavioral analysis showed that GWSS mating communication involved the emission of three male and two female signals, with specific roles in two distinct phases of mating behavior, identification and courtship. Mating success depended on vibrational duets between genders, which were temporarily interrupted in the presence of male rivalry. Male rivalry behavior involved the emission of three distinct rivalry signals. Two rivalry signals resemble female signals and were associated with replacement of the female in the duet by the rival male. The third rivalry signal was emitted by competing males. Data suggested that rival males used mimicry and hostile signals to interrupt the ongoing duet and gain access to a female. In the future, knowledge acquired from this study will be essential to develop a mechanical mating disruption method for GWSS control.

来源：Journal of Pest Science 期刊

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全文链接:http://agri.ckcest.cn/file1/M00/06/61/Csgk0FyYX4uAaEAwAB5ZdITCUX4201.pdf

2. Chapter 8 Central Neural Processing of Sound Signals in Insects （第八章 昆虫对声音信号的中枢神经处理）

简介：The sense of hearing contributes importantly to an animal's fitness. It allows detection of predators and prey and communication with conspecifics even in the dark and over large distances. Hearing organs evolved in about 20 groups of insects. Hearing is used by moths and other insects for avoiding predatory bats; by cicada, crickets/bushcrickets, moths, and grasshoppers for intraspecific communication; and by parasitic flies to locate singing hosts. Despite the variety of these insect groups, the neural processing of sound signals faces very similar fundamental challenges related to signal detection, directional processing, frequency discrimination, pattern recognition, and coping with self-generated noise. Solutions to these problems are implemented by specific network, cellular, and synaptic properties of neural circuits. Owing to their rather simple organization, insect auditory pathways can be explored and analyzed at the level of identified neurons to reveal fundamental mechanisms of auditory processing.

来源：Insect Hearing 图书

发布日期:2016-06-07

全文链接:http://agri.ckcest.cn/file1/M00/06/61/Csgk0FySBvCAXRW0ABlETgEHNik432.pdf

3. Chapter 2 Evolution of Acoustic Communication in Insects （第二章 昆虫声学传播的进展）

简介：Tympanal organs for hearing in the far field have evolved on multiple occasions among insects and are currently found in seven orders. Many, if not most, cases of insect hearing

probably originated as a means for detecting and avoiding predators. In particular, sensitivity to ultrasound appears to have coevolved with echolocation signaling by insectivorous bats. However, on an overall scale, hearing is relatively rare among insects in comparison with other modalities of perception, including detection of substrate vibration. Sound signaling in insects, which typically occurs in the context of mating communication, is rarer still and is known in only five orders. Phylogenetic analyses suggest that acoustic communication in the Lepidoptera and in the suborder Caelifera (grasshoppers) of the Orthoptera originated via a “sensory bias” mechanism. Hearing was ancestral and sound signaling by males subsequently arose on multiple, independent occasions. On the other hand, acoustic communication in the Cicadidae and in the suborder Ensifera (crickets, katydids) of the Orthoptera may have originated via coevolution between female perception and male signaling. The diversity of songs among acoustic insects may reflect genetic drift and reproductive character displacement. There is little evidence, however, that insect songs are adapted to specific physical environments. In one clade of acoustic insects, the diversification of song is associated with an unusually high rate of population differentiation and speciation, which may be facilitated by a genomic co-localization of loci influencing female response/preference and male signaling. The extent to which co-localization is a general factor in speciation remains to be explored.

来源：Insect Hearing 图书

发布日期:2016-06-07

全文链接:http://agri.ckcest.cn/file1/M00/06/61/Csgk0FySA6qAFX9TAAk5YgQvuLU682.pdf

4. Sound Communication in *Drosophila*（果蝇的声音传播）

简介：The fruit fly *Drosophila* melanogaster communicates acoustically via courtship songs and hears with antennal ears. Research over the past decade has provided insights into the neuronal basis of *Drosophila* sound production and hearing and the functional workings of *Drosophila* ears: the neural substrate for song production has been narrowed down to subsets of Fruitless^{M} positive neurons, and the neural pathways for hearing have begun to be revealed. Mechanisms of sound transduction, adaptation, and amplification in the fruit fly’s ear have been uncovered, and auditory relevant molecules have emerged from mutant screens. This chapter summarized the current state of research on *Drosophila* sound communication and hearing and discusses recent progress in the field.

来源：Insect Hearing and Acoustic Communication 图书

发布日期:2014-01-20

全文链接:http://agri.ckcest.cn/file1/M00/06/61/Csgk0FyR_lWAPXj1AAjxFNyB1x4517.pdf