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## ▶ 前沿资讯

### 1. Indian tea faces tough fight overseas from African variety (印度茶叶在海外面临着来自非洲品种的激烈竞争)

简介：印度茶叶在英国、欧盟(eu)和巴基斯坦正面临来自非洲茶叶的激烈竞争，因为生长在非洲大陆的茶叶价格大幅下跌。肯尼亚茶叶价格在一年内下跌22%，乌干达茶叶价格下跌36%。供应过剩已导致非洲茶叶价格跌至5年低点。印度茶叶协会(Indian tea Association)主席维维克·戈恩卡(Vivek Goenka)表示：“这正在影响印度茶叶出口，因为我们无法以低于非洲作物的价格供应茶叶。”“我们的生产成本很高，如果我们试图以更低的价格出口茶叶，我们将面临损失。”茶叶委员会正在制定一项修改拍卖机制的计划，以帮助提高茶叶价格，使卖家能够接触到更多的买家，并提高茶叶的质量。

来源：The Economic Times 网站

发布日期：2019-08-05

全文链接：[http://agri.ckceest.cn/file1/M00/OE/7F/Csgk0F1cs0iATL\\_1AAggBcg-A3A848.pdf](http://agri.ckceest.cn/file1/M00/OE/7F/Csgk0F1cs0iATL_1AAggBcg-A3A848.pdf)

### 2. Tea planters urge the Tea board to provide guidelines for tea waste export (茶农敦促茶叶委员会为茶叶废料的出口提供指导)

简介：Tea planters urge the Tea board to provide guidelines for tea waste export. A delegation of Tea planter association, North Eastern Tea Association (NETA) met Arun Kumar Ray, Deputy Chairman, Tea Board. In a memorandum the NETA stated, “We are aware that as per the Tea Waste (Control) Order, 1959, we are supposed to declare a minimum of 2% of our production as tea waste. But we have practically found that the tea waste can be as low as below 1% and at times may go up to 3% and above it all depends upon the fine percentage of green leaf and manufacturing process. Moreover Madras High Court through its order dated 22/02/2013 has fixed 0.20% as tea waste instead of 2%. We therefore request your good office not to force us to declare 2% as tea waste and instead it should be on actual.” The organisation added, “Please accept our gratitude for allowing export of tea waste. This can be a game changer for tea industry. Tea waste can be used for many other industries including cosmetic industry. We have not yet received any guidelines from Tea Board in regard to tea waste export. It will be of great help if guideline is issued at an early date. The tea waste licence needs to be renewed every year which at times is very cumbersome. A board meeting of the Tea Board took a decision to recommend to the Commerce Ministry regarding renewal of licence in every three years.

来源：The Economic Times 网站

发布日期：2019-08-02

全文链接：<http://agri.ckceest.cn/file1/M00/OE/7F/Csgk0F1c21uACaruAATdZGG9pPQ806.pdf>

## ▶ 学术文献

### 1. Causes of variability in male vibratory signals and the role of female

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## **choice in Mantophasmatodea (螳脩目 (Mantophasmatodea) 雄虫振动信号变异的原因及其雌虫选择的作用)**

简介: Communication systems that involve substrate vibrations are increasingly a focus of research since this communication mode - recently termed biotremology - has been found to be remarkably widespread in the animal kingdom. Vibrational signals are often used during courtship and therefore underlie both natural and sexual selection. Mantophasmatodea use species- and sex-specific substrate vibrational signals during courtship. We explored whether male vibrational signals of the South African heelwalker *Karoo-phasma biedouwense* vary with temperature, body condition and age, and tested female preference towards various signal pattern combinations. We recorded male signals under varying temperatures and over 3.5 weeks after onset of signaling. Our results show that the temporal structure of male signals is modified by changes in temperature, and changes with male age. Other characteristics, especially duty cycles, are less affected, but correlate with body condition. Females responded along a broad spectrum of signaling patterns, indicating that they do not favor signals of males of a certain age or condition. They were selective towards the fine structure of vibratory signals, suggesting that pulse repetition times carry species-specific information. Mantophasmatodea thus use vibrational signals to identify and localize a mating partner, but presumably not for precopulatory mate selection.

来源: Behavioural Processes 期刊

发布日期: 2019-07-11

全文链接: <http://agri.ckcest.cn/file1/M00/0E/7E/Csgk0F1aEEGAdyZJADDNE1iWArQ346.pdf>

## **2. Signal or cue? Locomotion-induced sounds and the evolution of communication (信号或提示? 运动引起的声音和传播的演变)**

简介: The author discuss five theoretical properties of locomotion-induced sounds. Locomotion-induced sounds frequently evolve from cues into signals. Distinguishing cues from signals can be difficult. To be a signal, either morphology or behaviour, or both are evolutionarily modified.

来源: Animal Behaviour 期刊

发布日期: 2018-09-20

全文链接: [http://agri.ckcest.cn/file1/M00/0E/7E/Csgk0F1aTTCAcv\\_oAAfqpCMMYK8272.pdf](http://agri.ckcest.cn/file1/M00/0E/7E/Csgk0F1aTTCAcv_oAAfqpCMMYK8272.pdf)

## **3. Reproductive strategy of the Nearctic leafhopper *Scaphoideus titanus* Ball (Hemiptera: Cicadellidae) (新北叶蝉 (*Scaphoideus titanus*, 半翅目: 蝉科) 的繁殖策略)**

简介: Mating behaviour of *Scaphoideus titanus* Ball, the vector of the grapevine disease Flavescence dorée, was investigated in order to determine the role of substrate-borne vibrational signals in intra-specific communication and pair formation. Vibrational signals were recorded from grapevine leaves with a laser vibrometer. Signalling activity of single males changed throughout the day and the peak in activity was associated with twilight and early night when 'call and fly' behaviour was observed. Pair formation began with the spontaneous emission of

male signals. The male calling signal consisted of a single series of pulses, partially accompanied with a 'rumble'. The male courtship phrase consisted of four consecutive sections characterized by two sound elements, pulse and 'buzz'. Female vibrational signals were emitted only in response to male signals. The female response was a single pulse that closely resembled male pulses and was inserted between pulses within the male signals. All recorded vibrational signals of *S. titanus* have a dominant frequency below 900 Hz. A unique feature of vibrational communication in *S. titanus* is well-developed intrasexual competition; males may use alternative tactics, in the form of disturbance signals, or silently approach duetting females (satellite behaviour). While the male-female duet appears to be essential for successful localization of females and copulation, it is also vulnerable to, and easily disrupted by, alternative tactics like masking.

来源: Bulletin of Entomological Research 期刊

发布日期: 2009-08-10

全文链接: <http://agri.ckcest.cn/file1/M00/OE/7F/Csgk0F1cp3CADW9BAAXU2hetZoQ541.pdf>

#### **4 . Certain environmental factors influencing the acoustic communication in the sexual behavior of the leafhopper *amrasca devastans* (Homoptera: Cicadellidae) (某些环境因素影响叶蝉 (*Amrasca Devastans*, 同翅目: 蝉科) 性行为中听觉交流)**

简介: The role of certain environmental factors in influencing the substrate-borne acoustic communication associated with the sexual behaviour of the leafhopper, *Amrasca devastans* (Distant) was studied under the laboratory conditions. The sound emission as well as the sexual behaviour was high at  $28 \pm 1^\circ\text{C}$  and was inhibited by a low ( $18 \pm 1^\circ\text{C}$ ) or a high temperature ( $38 \pm 1^\circ\text{C}$ ). A high humidity ( $\geq 80\%$  r.h.) was found to inhibit the sexual communication and behaviour of this leafhopper whereas a low humidity (30-40% r.h.) had no effect on these responses. Singing by the sexes in complete darkness was as high as in the presence of light. However, the copulatory responses were reduced in the dark. The leafhoppers kept under a short day-length (8L-16D) for 5 days after emergence sang and copulated as high percentages as those kept under a long day-length (13L-11D) for 5 days after emergence. The sexual communication leading to mating was not done by the two sexes being present on different leaves which had been in out of contact with each other; but was done by those being present on the same leaf. This fact imposes a severe limitation in the reproduction of these insects since no air-borne distance stimulus is involved in their communication.

来源: Applied Entomology & Zoology 期刊

发布日期: 1986-01-30

全文链接: <http://agri.ckcest.cn/file1/M00/OE/7E/Csgk0F1aDYSATK7cAAv1hmGs4EE128.pdf>