

两种棉花新象虫

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本文记述了两种棉花象虫。依据棉区昆虫工作人员的观察,棉尖象 *Phytoscaphus gossypii* (新种) 为害幼苗,能咬断嫩尖,影响棉苗正常发育。它也为害蕾铃期的叶片、苞叶、嫩尖、花蕾等部分。除棉花外,此虫还害玉米、大豆、大麻等作物的幼苗。它发生于关中、华北、苏北、内蒙古、甘肃等地区。

棉小卵象 *Calomycterus obconicus* (新种) 就是刘国土、范乘法 1934 年报道过的棉小象鼻虫 *Calomycterus* sp.。据他俩的观察,此虫主要为害幼苗,能咬断叶柄,蚕食落叶,有时竟把整块棉田的幼苗、叶片全部咬断,仅剩下顶芽。其为害程度可想而知。在幼苗生出前,它为害桑树嫩芽,所以桑园附近的棉田先受其害。此虫分布于江苏南部和浙江北部,即太湖周围。其危害早在 1934 年前便引起人们的注意,并由刘国土、范乘法报道了对其生活史的研究。

棉尖象 *Phytoscaphus gossypii* 新种 (图 1, 2)

体壁红褐色,被覆淡绿色而略发金光的鳞片,两侧和腹面鳞片色泽更加鲜艳,触角鳞

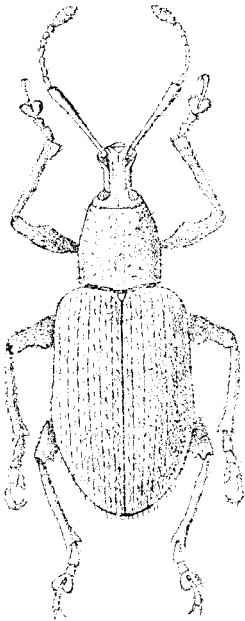


图1 棉尖象

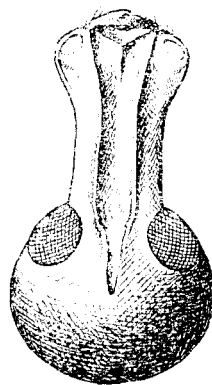


图2 棉尖象头部(去鳞片)

* 本所陆伯林同志代为绘图,浙江农业大学唐觉同志代采一批棉小卵象标本。

片细长，小盾片鳞片较淡而亮。前胸背板具模糊的暗褐色纵纹三条，鞘翅满布暗褐色云斑，触角棒褐色。鞘翅行间散布半直立鳞片毛，其长度小于行间宽度，头部和前胸的毛较短，触角、足和腹部的毛细而短。

头宽于长，额略窄于眼和喙宽（触角窝间），具明显的中沟，惟被鳞片遮蔽。喙细长，长度 2 倍于宽度（触角窝间），从基部至喙翼后两侧平行，喙翼颇突出；喙的背面宽约为整个宽的 $1/2$ ，两侧具隆线，中间具深沟，触角窝凹，中间具短隆线，隆线前具 V 形隆线，喙的腹面基部前中间有一小突起。触角窝内侧有一小而钝的突起。触角柄节细长，略短于索节与棒节之和，索节 1 长于索节 2 (12:9)，3—6 节长约相等，7 节略长于 6 节。棒长卵形，长度等于索节 5、6、7 三节之和。眼几乎不突出，从背面几乎完全看得见。前胸宽略大于长 (11:10♂, 11:9♀)，略呈梯形，后缘宽于前缘 (5:4)，基部前最宽，后缘中间略突出，中间两侧略凹，两侧前缘突出成眼叶，眼叶前缘有纤毛一排；背面密布刻点。小盾片长宽略相等。鞘翅长为宽的 1.7 倍 (♂) 或 1.6 倍 (♀)，从肩至翅坡逐渐放宽，翅坡以后逐渐缩圆，基部无龙骨形边；行纹细，刻点长，行间略凸。腿节基部 $1/3$ 有一尖齿，胫节端部内侧有一尖刺。

雄虫体长 3.9—4.7 毫米（不计喙），宽 1.7—2.0 毫米；雌虫体长 4.2—4.7 毫米（不计喙），宽 1.8—2.1 毫米。

雄虫腹板 1 中间略凹，前胸、鞘翅较窄，雌虫腹板 1 中间略凸，前胸、鞘翅略较宽。

本种和尖刺尖象 *Phytoscaphus dentirostris* Voss 近缘。它们的主要共同特征是：触角窝内侧有小突起，喙的腹面基部前中间有尖突起。本种不同于尖刺尖象的是：触角窝内侧的突起小而钝，前胸近于梯形，两侧仅微突出，鞘翅行间刚毛短于行间宽度，身体被覆淡绿色鳞片。

正模 ♂，配模 ♀，江苏徐州，1963. VII. 15。
副模 9♂♂，8♀♀，北京平谷，河北邯郸，河南安阳，陕西武功，江苏海门、徐州，内蒙古宁城，甘肃皋兰，VI. 10 至 VIII. 31，1951，1954，1959，1963—65。

棉小卵象 *Calomycterus obconicus*

新种 (图 3, 4)

体壁暗褐色，鳞片均一灰色而略发光，触角柄节被覆同样鳞片，小盾片鳞片白色。全身散布灰色毛，除腹部外，还掺杂褐色毛；鞘翅行间的毛最长，半直立，短于行间宽度，头部和前胸的毛较短，前胸两侧的毛最短，触角和足的毛细。

头宽度大于长度，额宽度略大于眼宽度的 2 倍，而略小于喙宽度的 2 倍。喙从基部至喙翼缩窄 (25:20)，背面端部凹，两侧有明显的隆线，中间有同样的隆线。这些隆线之间纵贯细刻线，长达头顶，喙两侧纵贯同样细刻线；喙和口

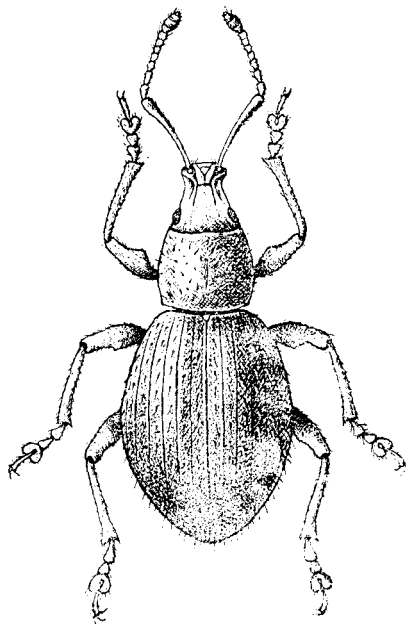


图 3 棉小卵象

上片以尖而高的V形隆线为界,之后,纵贯短而低的中隆线。这条隆线与前端的触角内缘相连,同时与上述喙两侧的隆线相连。触角短而粗,柄节几乎直,长度略超过前胸前缘,

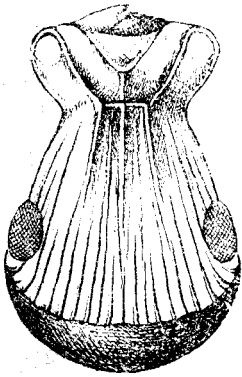


图4 棉小卵象头部(去鳞片)

索节1、2的长度约相等,索节1较粗,索节3—7倒圆锥形,宽大于长,但3节略长而7节略较宽。棒长卵形,长度小于宽度2倍,端部尖。眼几乎不突出,靠近头的两侧,从背面只能看见一小部分。前胸宽度略大于长度(10:8♂或11:8♀),两端为截断形,后缘较宽于前缘(10:9),有略隆而窄的边,前缘之后稍凹。表面粗糙,满布皱纹刻点,两侧鳞片在刻点周围陷落成孔,从孔生出短毛。背面中间具短隆线,突出于鳞片之外。小盾片长度略大于宽度,顶端钝圆。鞘翅卵形,肩缩圆,基部截断形,无龙骨形边,端部钝圆,无锐突,长约为宽的1 1/3,中部以前最宽;行纹细,刻点密,行间扁。股节1/3有齿,胫节端部内侧有刺。

雄虫体长3.3—3.6毫米(不计喙),宽1.6—1.8毫米;雌虫体长3.5—3.9毫米(不计喙),宽1.7—2.0毫米。

雄虫腹板1中间略凹,前胸、鞘翅较窄,雌虫腹板1中间凸,前胸、鞘翅略较宽。

本种与黑龙江的 *Calomycterus jucundus* Voss 近缘。但触角索节3—7呈倒圆钝形,小盾片明显,被覆白色鳞片,鞘翅无横纹。

正模♂,配模♀,浙江慈溪,1973。VII. 1,唐觉。副模6♂♂,6♀♀,江苏海门、南通,上海,浙江慈溪、杭州, V. 23至VIII. 31, 1920, 1937, 1965, 1973。

本文记述的新种模式标本保存在中国科学院北京动物研究所昆虫标本馆。

参 考 资 料

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TWO NEW CHINESE COTTON WEEVILS (COLEOPTERA: CURCULIONIDAE)

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Two new cotton weevils are described in the present paper. They attack the young shoots of the cotton plant causing considerable damage in the cotton cultivating areas. *Phytoscapus gossypii* sp. nov. injures the leaves, bracts, blossoms, tips of shoots and squares of cotton, but also attacks the corn, soybean, and hemp. *Calomycterus obconicus* sp. nov. causes damages also to the mulberry. The former species is widely distributed in North China, while the latter is limited in Kiangsu

and Chekiang Provinces.

***Phytoscaphus gossypii* sp. nov.** (Figs. 1, 2)

Derm reddish brown, clothed with light green scales and decorated with brownish nebula flecks on elytra, pronotum with three indistinct, dark stripes, the club of antennae blackish brown; intervals of elytra dispersed with a row of suberect setae, shorter than the breadth of intervals.

Front a little narrower than the rostrum between the scrobes, eyes almost flat. Rostrum two times as long as broad between the scrobes and parallel at pterygium. Front with a median furrow concealed by scales. The dorsal area of rostrum about half as broad as the whole breadth of rostrum, sulcate up to the anterior margin of eyes and carinate laterally. The underside before the base with a median conicle, the internal margin of scrobe with a small spine. The scape of antennae a little shorter than the combined length of funicle and club; the funicle with joint 1 longer than 2 (12:9), 3—6 almost equal in length, 7 longer than 6, club elongate-oval, about equal to the combined length of the joints 5—7 of funicle.

Prothorax a little broader than long (11:10), slightly rounded after the middle, broadest before the base; posterior margin a little broader than anterior margin and slightly bisinuate; ocular lobes developed and with distinct vibrissae; the dorsum closely punctured, from each puncture arising a short recumbent seta. Scutellum in most cases as long as broad. Elytra 1.7 times as long as broad, almost parallel before the declivity, after which rounded off, without being formed of a muero, without a keeled margin at base; striae fine, punctures elongate, intervals weakly convex. Femur with a sharp tooth, tibia with a spine at the end of inner side.

Length of males 3.9—4.7 mm, breadth of males 1.7—2.0 mm; length of females 4.2—4.7 mm, breadth of females 1.8—2.1 mm.

This weevil is closely related to *Phytoscaphus dentirostris* Voss. But it may be distinguished from the latter by the following points: the derm clothed with light green scales; the spine of the internal margin of scrobe smaller; the prothorax only slightly broader than long and weakly rounded laterally; intervals of elytra with a row of setae, shorter than the breadth of intervals.

Holotype ♂, allotype ♀, Kiangsu (Shuehow); paratypes, 7 ♂♂, 10 ♀♀, Peking (Pingku), Hopeh (Hantan), Honan (Anyang), Shensi (Wugong), Kiangsu (Haimen, Shuehow), Inner Mongolia (Ningchen), Kangsu (Gaolan), VI-25 to VIII-31, 1951, 1954, 1959, 1963—65.

***Calomycterus obconicus* sp. nov.** (Figs. 3, 4)

Derm piceous, densely clothed with uniformly grey, round scales, having a slight coppery reflection. Elytra dispersed with a row of long suberect grey setae, but shorter than the breadth of intervals, thorax with shorter recumbent setae.

Head and both dorsal and lateral areas of rostrum with fine striolae; eyes almost flat, located laterally and widely separated; front about twice as broad as the eye. Rostrum longer than broad between antennae, the dorsal area broadly and shallowly depressed down the middle, with its margins carinate and with a median carina terminated at the base, epistoma with its posterior margin bounded by a sharp, high

broadly v-shaped carina which adjoining a short, low median carina behind. Antennae with the scape extending a little beyond the anterior margin of prothorax. Funicle with joint 1 as long as 2, 3—7 broader than long, 3 a little longer than 4, 7 a little broader than 6, club oval, less than 2 times as long as broad. Prothorax transverse, truncate at both ends, posterior margin a little broader than the anterior margin (10 : 9), rounded laterally, widest before the middle; ocular lobes distinct; dorsum strongly convex, coarsely punctured, with an abbreviated median stripe. Scutellum longer than broad, covered with whitish scales. Elytra broadly oval in shape, 1.3 times as long as broad, widest before the middle, truncate at base, broadly rounded off at tips, the dorsal surface with shallow punctate striae, intervals slightly convex, with a row of setae. Femur with a small sharp tooth; tibia with a spine at the end of inner side.

Length of males 3.3—3.6 mm, breadth of males 1.6—1.8 mm; length of females 3.5—3.9 mm, breadth of females 1.7—2.0 mm.

The species is related to *C. jucundus* Voss, but differs from the latter in the antennae with joints 3—7 of funicle obconic and broader than long, and with the scutellum being distinct and clothed with whitish scales.

Holotype ♂, allotype ♀, Chekiang (Tzeki), VII—1, 1973; paratypes 6♂♂, 6♀♀, Kiangsu (Haimen, Nantung), Shanghai, Chekiang (Tzeki, Hangchow), V—23 to VII—31, 1920, 1937, 1965, 1973.

All the type specimens are preserved in the Insect Museum of Peking Institute of Zoology, Academia Sinica.