Faizuda-a new genus of Halyini with new species (Heteroptera, Pentatomidae, Pentatominae)

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Summary

While searching for specimens matching with the type of <u>Dalpada laosana</u> Distant, the Writer came across a female from Cochin China (Vietnam) in the B.M. (N.H.) London, collection, with well developed spinous antennephores. Similar females and males specimens were located amongst specimens on loan from Rijksmuseum van Natuurlijke Historie, Leiden. All these specimens originated from Vietnam, and belong to three new species (F. rogeri, F. kashifi, F. khatibi) under a new genus (Faizuda) which are illustrated and described in the following pages.

Introduction

The genus <u>Dalpada</u> in its strict sense, should be based on three species - <u>D. aspersa</u> Amyot and Serville, <u>D. oculata</u> (Fabricius) and <u>D. laosana</u> Distant. Types of <u>D. aspersa</u> A. and <u>S., D. oculata</u> (F.) and of <u>D. laosana</u> Dist. are all females. Matching females and males specimens for <u>D. aspersa</u> and <u>D. oculata</u> were easily found amongst the <u>B.M. (N.H.) collection</u>, but similar success was not achieved in the case of <u>D. laosana</u>. However, two females were located, which resembled the type and the accompanying female <u>D. laosana</u>. One of these females showed apparently well developed spinous antennephores. A further search for similar specimens amongst the loaned material from Leiden Museum yielded some 22 males and females, all from Cochin China - i.e. Vietnam. All this material represents three new species.

Although they superficially resemble the typical $\underline{Dalpada}$, a closer examination showed, however, that the antennephores of both males and females are spinous and that the male paramere is different from that of the $\underline{Dalpada}$ \underline{sensu} $\underline{stricto}$. For this material a new generic name $\underline{Faizuda}$, after the international poet \underline{Faiz} \underline{Ahmed} \underline{Faiz} , is here proposed and three new species are illustrated and described here.

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Faizuda genus novum

Similar to <u>Dalpada</u>, i.e. with expanded fore tibia, tylus slightly extended beyond juga which have rounded apices and sharp lateral angles, but antennephore with well developed spinous growth in both sexes, first antennal segment extended beyond lateral jugal angle. Pronotum with short humeral horns. Scutellum with basal angles more or less yellow, shining, impunctate spots and apex yellow, in which features it resembles several species of <u>Dalpada</u> complex. In some species there is sexual dimorphism in the extent of foretibial expansion, more expanded in males than in females.

Male genitalia: Ventral margin of pygophore with central, wide emargination enclosed by lateral lobes, inner surface of each lobe excavated, as well as their posterior margin multisinuate, between inner margin of each lobe there exists a median aperture, lower half of which is filled with a simple septum; dorsal margin of pygophore with a simple narrow median lip flanked by thick lateral margin covered with thick growth of stiff setae; lateral cavities deep and wide, their dorsal margin with thick growth of stiff setae continuous with above mentioned latero-dorsal margin of pygophore, lateral boundary of lateral cavities medially thick, with fine setae, dorsal and ventral parts thin; opening of pygophore multiarched.

Paramere: Viewed laterally with wide head and medium sized stem, posterior margin thick, upper half with fine ridges on the inner surface, outer surface with a row of long hairy setae.

Aedeagus: Well sclerotised theca, both dorsal and ventral pairs of thecal appendages semi-sclerotised; conjunctiva with trilobed membranous conjunctival appendage; vesica long, tubular, well sclerotised with a pair of elongate well sclerotised appendages.

Female plates, arcus and spermatheca: First valvifer broad triangular, 9 th paratergite short, spermatheca-duct near proximal and bulbous, spermathecal bulb small with both flanges, with three long tubules, sometimes extended to or beyond first flange, inner tube (joined to bulb) fine, easily broken while dissecting.

Type species Faizuda rogeri genus et species novum

Distribution: So far recorded only from Cochin China (Vietnam). There are three new species in this new genus.

Comments: The species of Faizuda seems to be confined to Vietnam. Other species belonging to Dalpada sensu stricto also occur in this area, to which species of Faizuda superficially resemble, but the shape of antennephore and that of the male paramere of the new genus separate it from Dalpada. Within Faizuda, the relative size of the spine of the antennephore provides a good specific character as will be seen under the descriptions of the three species. The dorsal tip of the male paramere also shows specific characters, although it would be comparatively easier to appreciate these differences through side -by - side comparison. In one of the species, the foretibia of both sexes are evenly but moderately expanded; in the second species, the male foretibia widely, but that of the female narrowly, expanded showing sexual dimorphism; and in the third species both male and

female foretibia evenly expanded. From the distribution data available it is clear that the habitat of species one and species two overlap, whereas the same cannot be said, yet, about species one and species three, although species two and species three share this characteristic.

Faizuda rogeri sp. n. (Figs. 1-17)

Colour: General body colour yellow with black punctures; head with marginal and 2 submedian black streaks, two short similar streaks, each between eyes and ocelli, latter red, eyes dark brown with inner yellow margin; antennae dark smoky brown, I segment with one dorsal and one ventral elongate yellow streak, its apex narrowly yellow, similarly bases of II and III narrowly but those of IV and V widely ringed with yellow; head beneath yellow with lateral black wide fascia interrupted with short yellow streaks, tip of tylus, labrum yellow with fine dark streak, labium I and II segment yellow, last half with dark streaks, III dark with yellow streaks, IV totally black; bucculae yellow; pronotum with six undefined dark fascia, calli area darker with short yellow streaks, humeral horns black with tips yellowish; prosternum beneath yellow with lateral dark fascia interrupted with short yellow dashes - in continuation of fascia beneath head; scutellum, basal angles and apex yellow, basal spots impunctate, apex with minute brown punctures, disc with sublateral undefined dark fascia forming a "y"; corium yellow with dark dashes, membrane smoky, appearing black, showing dark terga of abdomen; meso - and metasterna and abdomen with lateral dark fascia in continutaion of and similar to one on head and prosternum, last abdominal sternum with an oval large median black mark; connexiva base and apex broadly black, apex narrowly yellow; femora base yellow with red markings, three - fourth apical length covered with shallow black punctures intermixed with red markings; front tibia black with sub - basal yellow broad annulation, middle and hind tibiae - base and apex with black marking, middle with red line; tarsi - I and II segment dorsally yellow, underneath black, III segment and claws black.

Structures: Spine of antennephore large, extended up to one third length of first antennal segment, both in male as well as in female; rostrum extended up to middle of fourth, i.e. third visible abdominal segment; foretibia of both sexes equally widely expanded; male paramere - ridged area wide but apex of head of paramere narrow (Fig. 13); other features of male and female structures as described for the genus. Width of body 7.0 mm, length of body 15.0 mm.

Material examined: Holotype male, Cochin China, Thainguyan, le 21. vii. 1923 (R. Vitalis de Salvaza).). Paratypes. Cochin China, Thainguyan, le 21. vii. 1923 (R. Vitalis de Salvaza), l female; Cochin China, Bienhoc, le 19. vii. 1921 (R. Vitalis de Salvaza), l female, One female paratype in B.M. (N.H.) London; Holotype and one female paratype in museum, Leiden.

Comments: The new species, $\frac{\text{Faizuda rogeri}}{\text{my brother - in - law}}$ and who provided my family with moral support during our stay in the United Kingdom.

Faizuda kashifi sp. n. (Figs. 18-32)

Colour: Similar to that of \overline{F} , regeri sp. n. except that in the majority of females impunctate yellow spot at bases of scutellum slightly narrowed by intruding black punctures at their inner margin.

Structures: Spine of antennephore smaller than in <u>F. rogeri</u>, extended only up to one eighth of length of first antennal segment, in male and in female; rostrum extended up to middle or hind margin of fourth or third visible abdominal segment; foretibia of male widely, but that of female narrowly, expanded; male paramere, head at apex and ridged area wide (Fig. 30); other structures of male and female genitalia as described under the genus and figured here.

Material examined: Holotype male, Cochin China, Tayninh; le June 1923 (R. Vitalis de Salvaza). Paratypes, Cochin China, Pulo Condore, 1 - 30. xii. 1920 (C. Bodenklost) (Brit. Mus. 1922-166), 1 female; Cochin China, Tayninh, Dec. 1924 (E. le Moult) (Museum Leiden), 1 male, 2 females (label Dalpada 2); Cochin China, Pulo Condore, Aug. 1924 (E. le Moult), 1 female. One paratype female and one paratype male in B.M. (N.H.) London; rest in Leiden Museum.

Comments: Faizuda kashifi sp. n. resembles very closely F. rogeri sp. n. from which it differs by the shorter spine of antennephore and in addition, in females, by narrower expansion of foretibia. F. kashifi is named after Firmanullah Khan Yousufzai Kashif, who is my friend, a philosopher and a renowned Urdu poet of London. Mr. Kashif also writes and publishes English poetry and prose with a scientific and philosophic bent.

Faizuda khatibi sp. n. (Figs. 33-47)

Colour: Similar to that of the previous two species.

Structures: Spine of antennephore very small, just covering the antennephore, hardly reaching base of first antennal segment; fore tibia in male and in female somewhat moderately but equally expanded; rostrum extended to middle or hind margin of fourth or third visible abdominal segment; male paramere (Fig. 45) head rounded at apex, ridged area not wide, apically moderately wide; other structures as described under the genus and as figured.

Material examined: Holotype male, Cochin China, Pulo Condore, Aug. 1924 (E. le Moult). Paratypes, 1 male, 2 females, same data as Holotype male. 1 female, same data as Holotype, except Saigon and 4. vii. 1924. 2 females same data as Holotype, except le 6. viii. 1924 (R. Vitalis de Salvaza). 5 females and 2 males, same data as Holotype except Tayninh, Dec. 1924. One paratype male and one paratype female in B.M. (N.H.) London, on permanent loan; remainder in Leiden Museum.

Comments: Faizuda khatibi sp. n. differs from the other two previous species by its short antennephore spine which hardly extends to the base of I antennal segment (Fig. 39). This species is named after Mr. Farooq Hasan Khatib, my friend, a very senior citizen (+80 years old) of the United Kingdom. He has a wealth of historical

detail of European and Asian events stored away in his memory; but whom the Writer has yet failed to persuade to put this history to pen and paper.

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Özet

Halyini tribüsüne bağlı yeni bir cins <u>Faizuda</u> ve üç yeni türün orijinal deskripsiyonu (Het.:Pentatomidae:Pentatominae)

Bu çalışmada Vietnam'dan toplanan örneklere dayanılarak <u>Faizuda</u> isimli yeni bir cinsin ve bu cinse bağlı <u>F. rogeri</u> n. sp., <u>F. kashifi</u> n. sp. ve <u>F. khatibi</u> n. sp. isimli üç türün orijinal deskripsiyonları verilmektedir.

Explanation of figures:

Faizuda rogeri sp. n. Figs. 1-17: 1, dorsal view of head (male holotype); 2, the same (female paratype); 3, lateral view of base of I antennal segment (male H.T.); 4, the same (female P.T.); 5, lateral view of spine of antennephore (male H.T.); 6, the same (female P.T.); 7, dorsal view of same (male H.T.); 8, the same (female P.T.); 9, scutellum (male H.T.); 10, the same (female P.T.); 11, foretibia (male H.T.); 12, the same (female P.T.); 13, paramere, lateral view (male H.T.); 14, aedeagus, lateral view (male H.T.); 15, spermatheca (female P.T.); 16, spermathecal bulb of same; 17, arcus of same.

Faizuda kashifi sp. n. Figs. 18-32: 18, dorsal view of head (male holotype); 19, the same (female paratype); 20, lateral view of base of I antennal segment (male H.T.); 21, the same (female P.T.); 22, lateral view of spine of antennephore (male H.T.); 23, the same (female P.T.); 24, dorsal view of same (male H.T.); 25, the same (female P.T.); 26, scutellum (male H.T.); 27, the same (female P.T.); 28, foretibia (male H.T.); 29, the same (female P.T.); 30, paramere, lateral view (male H.T.); 31, spermatheca (female P.T.); 32, spermathecal bulb of same.

<u>Faizuda khatibi</u> sp. n. Figs. 33-47: 33, dorsal view of head (male holotype); 34, the same (female paratype); 35, lateral view of base of I antennal segment (male H.T.); 36, the same (female P.T.); 37, lateral view of spine of antennephore (male H.T.); 38, the same (female P.T.); 39, dorsal view of same (male H.T.); 40, the same (female P.T.); 41, scutellum (male H.T.); 42, the same (female P.T.); 43, foretibia (male H.T.); 44, the same (female P.T.); 45, paramere, lateral view (male H.T.); 46, spermatheca (female P.T.); 47, spermathecal bulb of same.





