A NEW SPECIES OF AGONUM, WITH SOME NOTES ON THE GENUS AGONUM AND ITS SUBGENERIC DIVISIONS

(Coleoptera, Carabidae)

By Akinobu Habu

National Institute of Agricultural Sciences, Tokyo

In this small paper I have described one new Agonum species, establishing one new subgenus for this species and added some correction regarding the conception of the genus Agonum in my paper, "Species of the Genus Agonum and its allied genera from Mt. Hiko, Kyushu" (Bull. Nat. Inst. Agr. Sci., Ser. C, No. 4, 1954).

Particular thanks are due to Mr. S. Kato and Professor T. Shiraki who have given me many kind encouragement as well as valuable advice, and to Mr. H. Kitano and Mr. K. Ozaki who have kindly offered me the specimens.

Subgenus Nagonium nov.

Subgenotype: Agonum kitanoi sp. nov.

Antennal segment 2 with one or two fine setae on upper side (d); prothorax with two pair of lateral setae, base unbordered; elytra without basal pore near scutellar striole (e); segment 1 of metathoracic tarsi bisulcate; underside of segment 5 in all tarsi ciliate; paramere without bristles at apex (b).

Agonum (Nagonium) kitanoi sp. nov.

"Kitano-hirata-gomimushi"

Length: 6.5 (holotype), 6.7 (allotype) mm.

Width: 2.5 (holotype), 2.8 (allotype) mm.

Head and prothorax black, shiny, with dark greenish tinge, elytra dark brown, shiny, somewhat aeneous palpi, antennae, apical, lateral and basal sides of prothorax, lateral side of elytra, elytral interval 1 and legs brown or sometimes somewhat dark, apical part of tarsal segments slightly dark, underside reddish black.

Head gently convex; surface impunctate; microsculpture distinct; neck weakly constricted at lateral parts; temporae shorter than eyes, slightly tumid behind eyes; hind supraorbital setae inserted fairly remote from eyes, behind level of hind margin of eyes; eyes moderately large and convex; frontal furrows shallow, rather wide, continued forwards to clypeal pores; clypeal suture not deep; clypeus rather convex at medio-basal part, front of clypeus feebly emarginate; apex of labrum straight, 6-setose; antennae reaching basal one-fourth of elytra, basal three segments and basal one-third portion of segment 4 glabrous, segment 4 a



little longer than segment 3; apical segment of palpi spindleform, somewhat acuminate at apex, but slightly truncate at extreme tip; apical segment of maxillary palpi one and one-third times as long as penultimate segment, penultimate segment with a few fine setae or hairs at apex; mentum with well-developed simple tooth; epilobes a little projecting on each side beyond lateral lobes.

Prothorax rather convex, widest at one-third distance from apex; surface impunctate, with a few faint transverse striations, basal foveae somewhat uneven; microsculpture isodiametric at medio-apical and basal parts; one and one-fourth times as wide as head, one and one-fourth times as wide as long in holo- and allotype; apex weakly emarginate, finely bordered (somewhat faintly at middle);



Agonum (Nagonium) kitanoi sp. nov.

a. The aedeagus, b. parameres, c. The dorso-apical part of the aedeagus, d. The first and second segments of the left antenna, e. The basal part of the left elytron

front angles obtuse, rounded; base nearly as wide as apex, gently arcuate, fairly unbordered; hind angles obtuse and somewhat rounded, but with rather distinct indication of angle; lateral sides unbordered, rather narrowly explanate from apical angle to middle, somewhat widely explanate and reflexed from middle to base, moderately rounded in front, gently rounded behind, weakly sinuate before hind angles; front marginal seta at widest part, hind marginal seta slightly before hind angle; median line relatively deep; front and hind transverse impressions shallow; basal foveae deep.

Apterous. Elytra weakly convex, oval, widest a little behind middle; impunctate; microsculpture rather distinct, forming moderately transversely wide meshes; about one and three-fifths times as wide and three times as long as prothorax, less than one and one-half times as long as wide in holo- and allotype; basal border gently oblique, moderately sinuate, adjoining lateral side nearly rounding shoulder; shoulder rounded, without tooth; lateral side moderately explanate, gently rounded from behind shoulder to widest point, thence moderately rounded to apex, apical sinuation distinct; apex widely rounded, without tooth; striae fine, rather weakly impressed, faintly punctate; scutellar striole moderately long, on interval 1; intervals nearly flat in \Diamond and \Diamond , interval 3 with five or six setiferous pores, in holotype with six at about one-seventh, one-fourth, threesevenths, three-fifths, four-fifths and eight-ninths respectively, the first three adjoining stria 3, the other three located between striae 2 and 3; marginal series of pores on interval 9 somewhat interrupted at middle or nearly uninterrupted, 6+1+9 on left elytron, 7+1+10 on right elytron in holotype, 5+2+10 and 7+10in allotype.

Underside impunctate; prosternal process unbordered, not carinate behind; metepisterna about one and one-fourth times as long as wide, sulcate at outer, front and inner sides; last ventral abdominal segment with one in \Im , with two setae in \Im on each side.

Prothoracic tibiae finely grooved; prothoracic tarsi of \Diamond with basal three segments weakly dilated, segment 1 less than twice as long as wide, segment 2 slightly

1956

KONTYÛ

longer than wide, somewhat wider than segment 1 or 3, segments 3 slightly wider than long, underside of segments 1 to 3 with whitish or yellowish scale-like hairs; basal segments of prothoracic tarsi in \mathcal{P} not sulcate on either side; mesothoracic tarsi with basal two, metathoracic tarsi with three segments more or less bisulcate, space between sulci weakly convex in segment 1 of meso- and metathoracic tarsi; segment 4 of all tarsi emarginate at apex, obsoletely bilobed, exterior lobe faintly longer than interior lobe; underside of segment 5 with usually three setae on each side.

Aedeagus gently curved in lateral view, base with a small membranous projection; apical lamella short, wide, thick; left paramere rather wide, apex rounded; right paramere relatively narrow, apex not pointed.

Habitat: Central Honshu, Japan.

Holotype: 1 3, Natsuzawa-tôge, Mt. Yatsugadake, Nagano Prefecture, VIII. 3, 1951, J. Kitano leg., under bark of dead *Abies Veitchii* Lindl.

Allotype: 1 9, Akadake, Mt. Yatsugadake, Nagano Prefecture, VII. 16, 1954, K. Ozaki leg., under bark.

Paratypes: $2 \varphi \varphi$, the same locality, J. Kitano leg.

Apart from the absence of basal umbilicate pore on the elytra this species is resembling A. (Agonum) chalcomum Bates, but the size is smaller, the hind supraorbital pores are more remote from behind the eyes. The absence of a basal pore on the elytra seems to be peculiar; so far as I am aware in the species of Agonum a basal pore is always present.

In my paper mentioned in the preface I regarded the subgenus *Platynus* as identical with *Agonum* s. str., but lately I have found a rather available difference between them: the base of the prothorax is faintly bordered or not bordered in European *A. sexpunctatum* Linné (the genotype of *Agonum*), *marginatum* Linné, *mülleri* Herbst, *viduum* Panzer and in Japanese *A. impressum* Panzer, *chalcomum* Bates, *suavissimum* Bates, *sculptipes* Bates, while it is distinctly bordered in European and Japanese *A. assimile* Paykull (the genotype of *Platynus*) and in Japanese *A. magnum* Bates, *protensum* Morawitz and *xestum* Bates. If this character is constant in other species of these two groups, it will be usefull in distinguishing the subgenus *Platynus* from the subgenus *Agonum*.

A. (Nagonium) kitanoi sp. nov. somewhat resembles *Platynus* in the shape of the prothorax, but the unbordered base of the prothorax suggests the relationship with Agonum s. str.

Having referred to Jeannel's Col. Carab. Malgache, II (1948), I treated *Col podes* as a synonym of *Agonum* s. str. in my above paper, but, to my regret, Jeannel's *Col podes brunneus* MacLeay, the genotype of this genus, seems to be his misidentification. From Andrewes' redescription of *Col podes brunneus* MacLeay in Trans. Ent. Soc. Lond., p. 147 (1919) I can imagine the following generic characters: the mentum is with a strong tooth; the elytra are minutely dentate at the apex, with a well-developed scutellar striole; interval 3 is with three pores; the prothoracic tibiae are not grooved on the outer side; the upper surface of the tarsi is grooved on both sides, the under surface is clothed with dense yellow hairs; the fourth tarsal segment is bilobed on all feet, the outer lobe is longer than the inner lobe in the meso- and metathoracic tarsi.

By the uugrooved tibiae, the prothorax without lateral setae, the underside of the tarsi with dense yellow hairs, *Colpodes* may be distinguishable from *Agonum*.

169