Review

Systematic studies on the species of Chironomidae recorded from Japan during the period from September 1997 to August 2000

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Abstract: The number of species of insect family Chironomidae breeding in Japan is very large, and more than one thousand species have already been recorded from this small country, including many new species. In the Monograph of Chironomidae by Sasa and Kikuchi (1995), a total of 757 species was recorded, among which only 131 were those already recorded from Europe, Americas, and other regions outside of Japan and East Asia, and in another monograph compiled by Sasa (1998), 176 species were added. In the present paper, additional 241 species recorded from Japan in 20 papers published as of July 2000 are recorded by according to taxonomic groups making the total number of Chironomidae of Japan 1,174.

INTRODUCTION

Extensive studies on taxonomy and biology of the insect family Chironomidae were commenced mainly by M. Tokunaga, Kyoto University, who recorded about 160 species from the present territory of Japan during the period from 1932 to 1965. Additional studies on the taxonomy and distribution of Chironomidae of Japan were started after World War II, mainly by H. Hashimoto, Shizuoka University, from about 1957, by M. Sasa and his coworkers, National Institute of Environmental Studies from about 1977, and by M. Yamamoto, Kyushu University, from about 1980, and a great deal of new information has been added. In the checklist of Chironomidae of Japan compiled by Sasa (1989), a total of 480 chironomid species had been recorded from Japan, among which only

131 (27.3%) were considered as belonging to the same species as those already described in other regions of the world including Europe, Africa and America, and the rest 349 (72.7%) were described as new species indigenous to Japan and compiled by Sasa and Kikuchi (1995), 757 species were recorded, and 535 among them were new species recorded by Sasa and coworkers. In the second monograph of "Chironomidae of Japan, 1998" compiled about 3.5 years thereafter by Sasa (1998), 176 species and 19 genera were added, and the total number of species reached 933 at this stage.

As shown in the reference of the present paper, another 20 papers were thereafter published as new records of Chironomidae of Japan as of July 2000, and a total of 241 species is newly recorded, mostly as new species. In the present paper, they are arranged by taxonomic groups according to

our present system. They are classified into 55 species and 19 genera of tribe Chirinomini, 58 species and 4 genera of tribe Metriocnemini, 7 species and 2 genera of tribe Corynoneurini, 3 species and 3 genera of subfamily Diamesinae, 2 species and 2 genera of subfamily Podonominae, and 9 species and 6 genera of subfamily Tanypodinae, and the total number of species of Chironomidae recorded from the present territory of Japan reached 1,174 as of July 2000. This kind of information is considered necessary for future systematic studies on this family of insects, which seems to have still many more unrecorded species in Japan and other region of the world.

The studies on Chironomidae are important not only in the taxonomy of this group of insects, but also in relation to environmental biology as indicators of water quality, as highly beneficial insects in the natural improvement of waters in lakes and streams, but also in medical entomology as causative agents of allergens such as bronchial asthma.

MATERIALS AND METHODS

Very many species of the non-biting midges, or the insect family Chironomidae (Diptera), have been collected by us from a number of localities in Japan, from the main islands of Hokkaido, Honshu, Shikoku and Kyushu, and also from many adjacent islands, and the number of species reached a total of 1,174 as of July 2000. Their larvae and pupae were collected mostly from various types of stagnant or running waters, but some also from the soil, and were identified mostly after the adult males were obtained by laboratory rearing. However, most of the specimens were collected while swarming in the air or resting in bushes or trees with insect net during the day, or at night with sucking tubes while attracted to light or with light traps.

The adult specimens thus collected were usually preserved in 70% ethanol solution in glass vials, and were individually dissected and mounted on slides on gum-chloral medium after the method described in "The Monograph of Chironomidae of Japan" by Sasa and Kikuchi (1995) and of Sasa (1998), and were also described in the following references.

A List of Chironomid species recorded from Japan after 1998

Scientific name, reference, page and Fig. No.

Subfamily CHIRONOMINAE Tribe Chirinomini

"The *Chironomus* complex"

<i>Chironomus</i> sp. "simantoabeus" Sasa, Suzuki et Sakai, 1998a;	p. 49,	Fig. 1
" <i>simantobeceus</i> "	p. 49,	Fig. 2
" <i>tusimaabeus</i> Sasa et Suzuki, 1999a;	p. 2,	Fig. 1
<i>Endochironomus hibaradecimus</i> Sasa et Suzuki, 1998b;	p. 26,	Fig. B1
<i>Yaesecundus</i> Sasa et Suzuki, 2000a;	p. 12	
<i>Yaesecundus iriobeceus</i> Sasa et Suzuki, 2000a;	p. 12,	Fig. 11

"The *Harnischia* complex"

<i>Cryptochironomus jokaprimus</i> Sasa et Ogata, 1999;	p. 86,	Fig. 1
<i>Cryptotendipes sibaabeus</i> Sasa, Sumita et Suzuki, 1999;	p. 184,	Fig. 3
" <i>irioabeus</i> Sasa et Suzuki, 2000a;	p. 11,	Fig. 10
<i>Harnischia ohmuraensis</i> Kobayashi et Suzuki, 1999a;	p. 80,	Fig. 1
" <i>simantocedeas</i> Sasa, Suzuki et Sakai, 1998a;	p. 50,	Fig. 3
" <i>sibabeceas</i> Sasa, Sumita et Suzuki, 1999;	p. 185,	Fig. 4

"	<i>sibacodea</i>	"	p. 185,	Fig. 8
<i>Parachironomus monochromus</i> (van der Wulp, 1874);				new record to Japan,
		in Kobayashi et Suzuki, 1999a;	p. 82,	Fig. 2
<i>Paracladopelma misumaiprima</i> Sasa et Suzuki, 1998b;			p. 18,	Fig. A10
"	sp. "misumaiseconda", in Sasa et Suzuki, 1998b;		p. 19,	Fig. A11
"	<i>simantodea</i> Sasa, Suzuki et Sakai, 1998a;		p. 51,	Fig. 4

"The *Polypedilum* complex"

<i>Microtendipes simantofegeus</i> Sasa, Suzuki et Sakai, 1998a;	p. 53,	Fig. 6
" <i>simantofegeus</i> " 1998a;	p. 54,	Fig. 7
" <i>tusimabeceus</i> Sasa et Suzuki, 1999a;	p. 4,	Fig. 2
" <i>tusimaceus</i> "	p. 5,	Fig. 3
" <i>tusimadeus</i> "	p. 5,	Fig. 4
" <i>iriocedeus</i> Sasa et Suzuki, 2000a;	p. 12,	Fig. 12
<i>Pentapedilum jokasecundum</i> Sasa et Ogata, 1999;	p. 89,	Fig. 2
" <i>tusimafeum</i> Sasa et Suzuki, 1999a;	p. 6,	Fig. 5
" <i>tusimafeum</i> "	p. 7,	Fig. 6
" <i>yakuabeum</i> Sasa et Suzuki, 2000b;	p. 56,	Fig. 3
" <i>iriodeum</i> Sasa et Suzuki, 2000a;	p. 13,	Fig. 13

The *nubifer* group of subgenus *Polypedilum*

<i>Polypedilum</i> (<i>Polypedilum</i>) <i>ginzanprimum</i> Sasa et Suzuki, 1998b;	p. 13,	Fig. A5
<i>Polypedilum</i> " <i>mismaitertium</i> "	p. 20,	Fig. A13
" " <i>simantoheium</i> Sasa, Suzuki et Sakai, 1998a;	p. 56,	Fig. 9
" " <i>simantoiyeum</i> " 1998a;	p. 57,	Fig. 10
" " <i>simantomaculatum</i> " 1998a;	p. 58,	Fig. 11
" " <i>tusimageheum</i> Sasa et Suzuki, 1999a;	p. 8,	Fig. 7
" " <i>tusimaheium</i> Sasa et Suzuki, 1998a;	p. 9,	Fig. 8
" " <i>yakubeceum</i> Sasa et Suzuki, 2000b;	p. 57,	Fig. 5
" " <i>yakuceum</i> Sasa et Suzuki, 2000b;	p. 57,	Fig. 6

The *nubeculosum* group of subgenus *Polypedilum*

<i>Polypedilum</i> (<i>Polypedilum</i>) <i>misumaiquartum</i> Sasa et Suzuki, 1998b;	p. 21,	Fig. A14
" " <i>tusimaiyeum</i> Sasa et Suzuki, 1999a;	p. 12,	Fig. 13
" " <i>yakudeum</i> Sasa et Suzuki, 2000b;	p. 59,	Fig. 9
" " <i>isigabeceum</i> Sasa et Suzuki, 2000a;	p. 5,	Fig. 2
" " <i>iriofeum</i> "	p. 15,	Fig. 15
" " <i>iriogeum</i> "	p. 16,	Fig. 16

* (lateral seta on dorsal appendage is occasionally absent in this species)

The subgenus *Tripodura*, genus *Polypedilum*

<i>Polypedilum</i> (<i>Tripodura</i>) <i>ginzansecundum</i> Sasa et Suzuki, 1998b;	p. 14,	Fig. A6
" " <i>sibadeum</i> Sasa, Sumita et Suzuki, 1999;	p. 187,	Fig. 6

The subgenus *Uresipedilum*, genus *Polypedilum*

<i>Polypedilum</i> (<i>Uresipedilum</i>) <i>ginzantertium</i> Sasa et Suzuki, 1998b;	p. 15,	Fig. A7
" " <i>simantokeum</i> Sasa, Suzuki et Sakai, 1998a;	p. 59,	Fig. 12
<i>Prochironomus irioheius</i> Sasa et Suzuki, 2000a;	p. 16,	Fig. 17
<i>Stenochironomus irioieus</i> Sasa et Suzuki, 2000a;	p. 17,	Fig. 18
" <i>gotoabeus</i> Sasa et Suzuki, 2000c;	p. 142,	Fig. 1
" <i>sibaefeus</i> Sasa, Sumita et Suzuki, 1999;	p. 188,	Fig. 7
<i>Tosayusurika</i> Sasa, Suzuki et Sakai, 1998a;	p. 52	
<i>Tosayusurika simatoeaea</i> Sasa, Suzuki et Sakai, 1998a;	p. 52,	Fig. 5
<i>Yaeprimus</i> Sasa et Suzuki, 2000a;	p. 4	
<i>Yaeprimus isigaabeus</i> Sasa et Suzuki, 2000a;	p. 4,	Fig. 1
<i>Yaequartus</i> Sasa et Suzuki, 2000a;	p. 19	
<i>Yaequartus iriokeus</i> Sasa et Suzuki, 2000a;	p. 19,	Fig. 20
<i>Yaetertius</i> Sasa et Suzuki, 2000a;	p. 18	

Yaetertius iriojekeus Sasa et Suzuki, 2000a;

p. 18, Fig. 19

"Tribe Tanytarsini"

Cladotanytarsus simantolemeus Sasa, Suzuki et Sakai, 1998a;

p. 60, Fig. 13

" *tusimajekeus* Sasa et Ogata, 1999;

p. 13, Fig. 14

" *yakuefeus* Sasa et Suzuki, 2000b;

p. 60, Fig. 12

" *yakufegeus* Sasa et Suzuki, 2000b;

p. 61, Fig. 13

Micropsectra jokatertia Sasa et Ogata, 1999;

p. 92, Fig. 4

" *jokaquarta* Sasa et Ogata, 1999;

p. 93, Fig. 5

" *simantoneoa* Sasa, Suzuki et Sakai, 1998a;

p. 62, Fig. 15

" *tusimakelea* Sasa et Suzuki, 1999a;

p. 16, Fig. 16

" *tusimalemea* "

p. 17, Fig. 18

" *tusimamenea* "

p. 18, Fig. 19

" *tusimanenoa* "

p. 19, Fig. 20

" *tusimaopea* "

p. 19, Fig. 21

" *tusimapeqnea* "

p. 20, Fig. 22

" *tusimaquerea* "

p. 21, Fig. 23

" *tusimaresea* "

p. 22, Fig. 24

Rheotanytarsus tusimaseleus Sasa et Suzuki, 1999a;

p. 23, Fig. 25

Tanytarsus ginzanquartus Sasa et Suzuki, 1998b;

p. 16, Fig. A8

" *kamimurai* Sasa et Suzuki, 1998b;

p. 30, Fig. B4

" *sibafegeus* Sasa, Sumita et Suzuki, 1999;

p. 189, Fig. 9

" *simantoopeus* Sasa, Suzuki et Sakai, 1998a;

p. 63, Fig. 16

" *simantopequeus* "

p. 63, Fig. 17

" *simantoquereus* "

p. 64, Fig. 18

also in p. 70, Fig. 26

" *simantoreseus* "

p. 65, Fig. 19

" *simantoseteus* "

p. 66, Fig. 20

" *simantoteuus* "

p. 67, Fig. 21

" *simantouveus* "

p. 68, Fig. 22

" *simantoveweus* "

p. 68, Fig. 23

" *simantowexeus* "

p. 69, Fig. 24

" *simantoxeyeus* "

p. 70, Fig. 25

" *simantoyezeus* "

p. 71, Fig. 27

" *tusimatbeceus* Sasa et Suzuki, 1999a;

p. 25, Fig. 27

" *tusimatcedeus* "

p. 25, Fig. 28

" *tusimatdeus* "

p. 26, Fig. 29

" *tusimatefeus* "

p. 27, Fig. 30

" *tusimatfegeus* "

p. 27, Fig. 31

" *tusimatgeheus* "

p. 28, Fig. 32

" *tusimatheiis* "

p. 29, Fig. 33

" *tusimatijeus* "

p. 30, Fig. 35

" *tusimatjekeus* "

p. 31, Fig. 36

" *tusimatkeleus* "

p. 31, Fig. 37

" *tusimatlemeus* "

p. 32, Fig. 38

" *tusimatneous* "

p. 33, Fig. 40

" *tusimatopeus* "

p. 34, Fig. 41

" *tusimatpequeus* "

p. 35, Fig. 42

" *ikicedeus* Sasa et Suzuki, 1999c;

p. 149, Fig. 4

" *ikideeus* "

p. 150, Fig. 5

" *ikiefeus* "

p. 150, Fig. 6

" *ikifegeus* "

p. 151, Fig. 7

" *isigacedeus* Sasa et Suzuki, 2000a;

p. 6, Fig. 3

" *iriolemeus* "

p. 20, Fig. 21

" *irioneneus* "

p. 21, Fig. 22

" *irioneneous* "

p. 21, Fig. 23

" *irioopeus* "

p. 21, Fig. 24

"	<i>yakugeheus</i> Sasa et Suzuki, 2000b;	p. 64,	Fig. 17
"	<i>yakuheius</i> "	p. 64,	Fig. 18
"	<i>yakuijeus</i> "	p. 65,	Fig. 19
"	<i>yakujekeus</i> "	p. 66,	Fig. 20
"	<i>tonebeceus</i> Sasa et Tanaka, 2000;	p. 1,	Fig. 2
"	<i>gotodeeus</i> Sasa et Suzuki, 2000c;	p. 152,	Fig. 7

Tribe Orthocladiini, Subfamily Orthoclaadiinae

<i>Kurobebrillia</i> Sasa et Ogata, 1999;	p. 96	
<i>Kurobebrillia jokuquinta</i> Sasa et Ogata, 1999;	p. 96,	Fig. 6
<i>Pseudobrillia gotobeca</i> Sasa et Suzuki, 2000c;	p. 144,	Fig. 2
" " <i>tusimoabeus</i> Sasa et Suzuki, 1999b;	p. 78,	Fig. 2
" (<i>Isocladius</i>) <i>uresibeceus</i> Sasa et Suzuki, 1998a;	p. 79,	Fig. 4
" " <i>ikigeheus</i> Sasa et Suzuki, 1999c;	p. 154,	Fig. 10
" " <i>tonecedeus</i> Sasa et Tanaka, 2000;	p. 2,	Fig. 3
<i>Paratrithocladius kyogokuprimus</i> Sasa et Suzuki, 1998b;	p. 24,	Fig. A17
" <i>tusimobeceus</i> Sasa et Suzuki, 1999b;	p. 80,	Fig. 3
" <i>tusimocedeus</i> "	p. 80,	Fig. 4
" <i>tusimodeeus</i> "	p. 81,	Fig. 5
" <i>gotoeheus</i> Sasa et Suzuki, 2000c;	p. 154,	Fig. 8
<i>Rheocricotopus</i> (<i>Paracricotopus</i>) <i>tusimoeheus</i> Sasa et Suzuki, 1999b;	p. 82,	Fig. 6
" (<i>Rheocricotopus</i>) <i>isigadeeus</i> Sasa et Suzuki, 2000a;	p. 7,	Fig. 5
" (") <i>yakulemeus</i> Sasa et Suzuki, 2000b;	p. 69,	Fig. 24
" (") <i>gotocedeus</i> Sasa et Suzuki, 2000c;	p. 145,	Fig. 4

* Note: This species was described in the original paper without giving the subgenus name, and is here classified into the above subgenus since setae on abdominal tergites are rather irregularly distributed.

<i>Eukiefferiella gunmaquarta</i> Sasa et Tanaka, 1998;	p. 2,	Fig. 2
" <i>uresicedea</i> Sasa et Suzuki, 1998a;	p. 80,	Fig. 5
" <i>sikimiensis</i> "	p. 86,	Fig. 13
" <i>jokasexta</i> Sasa et Ogata, 1999;	p. 97,	Fig. 7
" <i>jokaseptima</i> "	p. 99,	Fig. 8
" <i>tusimofegea</i> Sasa et Suzuki, 1999b;	p. 84,	Fig. 9
" <i>tusimogehea</i> "	p. 85,	Fig. 11
" <i>tusimoheia</i> "	p. 85,	Fig. 12
" <i>tusimoijsa</i> "	p. 86,	Fig. 13
" <i>tusimoijsa</i> "	p. 87,	Fig. 14
" <i>tusimokelea</i> "	p. 88,	Fig. 15
" <i>isigaeheus</i> Sasa et Suzuki, 2000a;	p. 8,	Fig. 6
" <i>yakumenea</i> Sasa et Suzuki, 2000b;	p. 71,	Fig. 26
" <i>yakuneoa</i> "	p. 71,	Fig. 27
" <i>yakuopea</i> "	p. 72,	Fig. 28
" <i>yakupequea</i> "	p. 73,	Fig. 29
" <i>yakuquerea</i> "	p. 19,	Fig. 30
" <i>yakuresea</i> "	p. 20,	Fig. 31
" <i>yakusetea</i> "	p. 20,	Fig. 32
" <i>tonedeea</i> Sasa et Tanaka, 2000;	p. 2,	Fig. 4
" <i>tonefeea</i> "	p. 3,	Fig. 5
" <i>gotogeheus</i> Sasa et Suzuki, 2000c;	p. 158,	Fig. 11
<i>Hydrobaenus tusimolemeus</i> Sasa et Suzuki, 1999b;	p. 88,	Fig. 16
" <i>tusimomeneus</i> "	p. 89,	Fig. 17
<i>Orthocladus</i> (<i>Euorthocladus</i>) <i>tusimoopeus</i> Sasa et Suzuki, 1999b;	p. 91,	Fig. 19
<i>Orthocladus</i> (<i>Orthocladus</i>) <i>tusimopequeus</i> Sasa et Suzuki, 1999b;	p. 92,	Fig. 21
" (") sp. "yakuteuus" Sasa et Suzuki, 2000b;	p. 21,	Fig. 33
<i>Psectrocladius</i> (<i>Monopsectrocladius</i>) <i>tusimoquereus</i> Sasa et Suzuki, 1999b;	p. 93,	Fig. 22
<i>Psectrocladius</i> (<i>Monopsectrocladius</i>) <i>yakuuueus</i> Sasa et Suzuki, 2000b;	p. 77,	Fig. 34
<i>Psectrocladius</i> (") <i>yakuuueus</i> "	p. 78,	Fig. 35
" (") <i>yakuuueus</i> "	p. 78,	Fig. 36

" (") <i>yakuxeyus</i> "	p. 79,	Fig. 37
<i>Psectrocladius</i> (<i>Psectrocladius</i>) <i>tusimoreseus</i> Sasa et Suzuki, 1999b;	p. 94,	Fig. 23
" " <i>tusimoseteus</i> Sasa et Suzuki, 1999b;	p. 95,	Fig. 24
" " <i>gotoheius</i> Sasa et Suzuki, 2000c;	p. 160,	Fig. 15
<i>Setukoyusurika</i> Sasa et Suzuki, 2000c		
<i>Setukoyusurika</i> <i>gotoijeus</i> Sasa et Suzuki, 2000c;	p. 161,	Fig. 16

Tribe Metriocnemiini, subfamily Orthocladiinae

<i>Apometricnemus japonicus</i> Kobayashi et Suzuki, 1999b;	p. 69,	Figs. 1–9
<i>Chaetocladius perennis</i> (Meigen, 1830), new record in Sasa and Tanaka, 1998;	p. 4,	Fig. 4
<i>Epicoccladius kibaprimus</i> Sasa et Sumita, 1998;	p. 72,	Fig. 1
" <i>siratoriprimus</i> Sasa et Suzuki, 1998a;	p. 75,	Fig. 1
" <i>seiryuopeus</i> Sasa, Suzuki et Sakai, 1998b;	p. 115,	Fig. 16
<i>Heterotrissoccladius</i> sp. "tusimoteuus", in Sasa and Suzuki, 1999b;	p. 96,	Fig. 25
<i>Ikiprimus</i> Sasa et Suzuki, 1999c;	p. 157	
<i>Ikiprimus ikiijeus</i> Sasa et Suzuki, 1999c;	p. 157,	Fig. 13
<i>Ikisecundus</i> Sasa et Suzuki, 1999c;	p. 158	
<i>Ikisecundus ikijeus</i> Sasa et Suzuki, 1999c;	p. 158,	Fig. 14
<i>Limnophyes siratorisecundus</i> Sasa et Suzuki, 1998a;	p. 76,	Fig. 2
" <i>jokaotavus</i> Sasa et Ogata, 1999;	p. 101,	Fig. 9
" <i>seiryuijeus</i> Sasa et Sakai, 1999b;	p. 109,	Fig. 10
" <i>ikikeleus</i> Sasa et Suzuki, 1999c;	p. 159,	Fig. 15
" <i>ikilemeus</i> "	p. 159,	Fig. 16
" <i>ikimeneus</i> "	p. 160,	Fig. 17
" <i>isigafegeus</i> Sasa et Suzuki, 2000a;	p. 8,	Fig. 7
" <i>iriopequeus</i> Sasa et Suzuki, 2000a;	p. 23,	Fig. 25
" <i>yakyabeus</i> Sasa et Suzuki, 2000b;	p. 81,	Fig. 39
" <i>yakybeceus</i> "	p. 81,	Fig. 40
" <i>yakycedeus</i> "	p. 82,	Fig. 41
" <i>yakydeus</i> "	p. 83,	Fig. 42
" <i>yakyfeus</i> "	p. 84,	Fig. 43
<i>Metriocnemus</i> (<i>Metriocnemus</i>) <i>siratoritertius</i> Sasa et Suzuki, 2000b;	p. 77,	Fig. 3
<i>Metriocnemus</i> (") <i>tusimouveus</i> Sasa et Suzuki, 1999b;	p. 97,	Fig. 27
" (") <i>ikineous</i> Sasa et Suzuki, 1999c;	p. 163,	Fig. 23
" (") <i>yakyheius</i> Sasa et Suzuki, 2000b;	p. 87,	Fig. 46
" (") <i>yakyijeus</i> , "	p. 99,	Fig. 47
<i>Metriocnemus</i> (<i>Tosacladius</i>) <i>seiryulemeus</i> Sasa, Suzuki et Sakai, 1998b;	p. 112,	Fig. 13
" " <i>seiryumeneus</i> "	p. 113,	Fig. 14
" " <i>tusimouveus</i> Sasa et Suzuki, 1999b;	p. 97,	Fig. 27
" " <i>isigageheus</i> Sasa et Suzuki, 2000a;	p. 9,	Fig. 8
<i>Okinawayusurika seiryujekea</i> Sasa, Suzuki et Sakai, 1998b;	p. 110,	Fig. 11
" <i>yakyfegea</i> Sasa et Suzuki, 2000b;	p. 86,	Fig. 44
" <i>yakygehea</i> "	p. 87,	Fig. 45
<i>Omuracladius</i> , gen. nov., in Sasa et Suzuki, 1998a;	p. 87	
for <i>matsuoi</i> (Sasa et Shimomura, 1993), recorded as <i>Trissoccladius</i>		
<i>Parakiefferiella tusimowexeus</i> Sasa et Suzuki, 1999b;	p. 98,	Fig. 29
" <i>yakytriangulata</i> Sasa et Suzuki, 2000b;	p. 89,	Fig. 48
" <i>yakykelea</i> "	p. 90,	Fig. 49
" <i>yakylemea</i> "	p. 90,	Fig. 50
<i>Paraphaenoccladius tusimoxeyus</i> Sasa et Suzuki, 1999b;	p. 100,	Fig. 30
<i>Pseudosmittia hibaraundecima</i> Sasa et Suzuki, 1999b;	p. 27,	Fig. B2
" <i>seiryupequea</i> Sasa, Suzuki et Sakai, 1998b;	p. 117,	Fig. 19
" <i>seiryuquerea</i> ; "	p. 118,	Fig. 20
" <i>yakymenea</i> Sasa et Suzuki, 2000b;	p. 92,	Fig. 52
" <i>yakyneoa</i> "	p. 93,	Fig. 53
" <i>yakyopea</i> "	p. 94,	Fig. 54
" <i>yakypequea</i> "	p. 94,	Fig. 55

"	<i>yakytaira</i>	"	p. 95,	Fig. 56
<i>Smittia gunmaquinta</i>	Sasa et Tanaka, 1998;		p. 42,	Fig. 5
"	<i>uresideea</i>	Sasa et Suzuki, 1998a;	p. 83,	Fig. 9
"	<i>uresifea</i>	Sasa et Suzuki, 1998a;	p. 84,	Fig. 10
"	<i>uresifegea</i>	Sasa et Suzuki, 1998a;	p. 84,	Fig. 11
"	<i>seiryuwewea</i>	Sasa, Suzuki et Sakai, 1998b;	p. 120,	Fig. 31
"	<i>seiryuwexea</i>	Sasa, Suzuki et Sakai, 1998b;	p. 121,	Fig. 32
"	<i>tusimoyezea</i>	Sasa et Suzuki, 1999b;	p. 101,	Fig. 36
"	<i>yakyquerea</i>	Sasa et Suzuki, 2000b;	p. 97,	Fig. 56
"	<i>yakyresea</i>	"	p. 97,	Fig. 57
<i>Toyamayusurika</i>	Sasa et Suzuki, 1999b;		p. 104	
<i>Toyamayusurika tusimuabea</i>	Sasa et Suzuki, 1999b;		p. 102,	Fig. 32
"	<i>tusimubecea</i>	"	p. 103,	Fig. 33
<i>Toyamayusurika tusimucedea</i>	Sasa et Suzuki, 1999b;		p. 104,	Fig. 34
"	<i>tusimudeea</i>	"	p. 105,	Fig. 35

Tribe Corynoneurini, subfamily Orthocladiinae

<i>Corynoneura ginzanquinta</i>	Sasa et Suzuki, 1998b;	p. 17,	Fig. A9
"	<i>seiryuresea</i> Sasa, Suzuki et Sakai 1998b;	p. 123,	Fig. 22
"	<i>isigaijeus</i> Sasa et Suzuki, 2000a;	p. 10,	Fig. 9
<i>Thienemanniella tusimuefea</i>	Sasa et Suzuki, 1999b;	p. 107,	Fig. 39
"	<i>tusimufegea</i> "	p. 107,	Fig. 40
"	<i>yakusetea</i> Sasa et Suzuki, 2000b;	p. 100,	Fig. 62
"	<i>gotopallida</i> Sasa et Suzuki, 2000c;	p. 163,	Fig. 18

Subfamily Diamesinae

<i>Potthastia longimana</i>	Kieffer, 1922; p. 125, Fig. 33, new name for <i>Diamesa (Psilodiamesa) campestris</i> Edwards of Tokunaga (1965)			
<i>Syndiamesa kyogokusecunda</i>	Sasa et Suzuki, 1998b;	p. 25,	Fig. A18	

Subfamily Podonominae

<i>Boreochlus longicoxalsetosus</i>	Kobayashi et Suzuki, 2000;	p. 319,	Figs. 1–6
<i>Paraboreochlus okinawanus</i>	Kobayashi et Kuranishi, 1999;	p. 601,	Fig. 1

Subfamily Tanypodinae

<i>Conchapelopia seiryusetea</i>	Sasa, Suzuki et Sakai, 1998b;	p. 126,	Fig. 25
"	sp. B, "seiryuteua", in Sasa, Suzuki et Sakai, 1998b;	p. 127,	Fig. 26
"	<i>tusimugehea</i> Sasa et Suzuki, 1998b;	p. 108,	Fig. 41
"	<i>sukayusecunda</i> Sasa et Suzuki, 1998b;	p. 31,	Fig. B5
<i>Paramerina tusimuheia</i>	Sasa et Suzuki, 1999b;	p. 109,	Fig. 42
<i>Rheopelopia ornata</i>	(Meigen, 1838), new record in Sasa, Suzuki et Sakai, 1998b;	p. 129,	Fig. 28
"	<i>seiryuuea</i> Sasa, Suzuki et Sakai, 1998b;	p. 129,	Fig. 29
<i>Protanypus</i> sp. "inawa",	in Sasa et Suzuki, 1998b;	p. 28,	Fig. B3
<i>Yaequintus</i>	Sasa et Suzuki, 2000a;	p. 24	
<i>Yaequintus irioquereus</i>	Sasa et Suzuki, 2000a;	p. 24,	Fig. 26

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摘 要

最近に日本から新しく記録されたユスリカの種類

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ユスリカ科の昆虫にはその地理的分布や発生源の環境

に応じて極めて多くの種類が見出される。日本産のユスリカについては、主として徳永雅明が1932年から1965年にかけて、当時の日本のほぼ全土にわたり採集された約160種を記録した。我々も1977年から今日に至る約20年あまりの期間に、日本全土、および近隣諸国にわたり、広範な地域でユスリカの採集とその分類を行い、その中、現在の日本領土だけからでも、佐々、菊池(1985)のモノグラフ(333頁)において757種類を記録し、その中535種は日本特産の新種で、131種のみが諸外国ですでに記録されているものと同種と判断されている。さらに佐々(1998)の二冊目のモノグラフ(156頁)においては新たに176種、15属が日本産ユスリカ科として追加された。

今回の報告は、その後1997年9月から2000年8月にかけて出版されたいろいろな学術雑誌に掲載された20の文献に新たに記載された日本産ユスリカ科の種類を、分類学的な系列に整理したものである。これらは全部で241種に及び、その結果、日本産ユスリカの記録は1,174種に及んだ。このリストは今後のユスリカ科の分類学的研究には欠くべからざる資料である。

これまで佐々、および共同研究者が、日本とその周辺諸国で採集し、種の記載に使用したユスリカ科のスライド封入標本は、2000年8月末に茨城県つくば市の国立環境研究所に保管をお願いし、それに伴う文献とともに、国内および外国よりの来訪の研究者に公開して利用していただけるよう、配慮した。