

Tenebrionidae from the Nansei Islands XI (Coleoptera)

Chujo, Michitaka
Hikosan Biological Laboratory, Faculty of Agriculture Kyushu University

<https://doi.org/10.5109/24145>

出版情報：九州大学大学院農学研究院紀要. 41 (3/4), pp.197-204, 1997-03. Kyushu University
バージョン：
権利関係：

Tenebrionidae from the Nansei Islands XI (Coleoptera)*

Michitaka Chûjô

Hikosan Biological Laboratory, Faculty of Agriculture Kyushu University, Hikosan,
Fukuoka 824-07, Japan

(Received November 29, 1996; Accepted December 17, 1996)

Eleventh report on the Tenebrionidae from the Nansei Islands, Japan, treats the tribe Leiochrini including description of a new subspecies, *Derispia japonica yaeyamana* from the Yaeyama Isls. Keys to the genera and species, and distributional data of species are presented.

Tribe LEIOCHRINI from the Nansei Islands

Lewis, 1894, Ann. Mag. Nat. Hist., [6], 13(77): 390. - Gebien, 1940, Kat. Tenebr., 2: 431(556). - Kaszab, 1946, Verlag Ungar. Naturwiss. Mus., 221pp.; id., 1961, Acta Zool. Acad. Sci. Hungaricae, 7(1-2): 139-184, 45 figs.; id., 1961, loc. cit., 7(3-4): 433-466, 21 figs.; id., 1961, Ann. Hist.-nat. Mus. Nat. Hungarici, 53: 357-380. - Miyatake, 1961, Trans. Shikoku Ent. Soc., 7(1-2): 33-40, 9 figs.

Key to the genera of the Leiochrini from the Nansei Islands

- 1 Tarsal segments simple, from 1st to penultimate segments with under surface not prolonged, every tibia without keel on out side, elytra with punctate-striae
.....*..... ***Derispia*** Lewis, 1894
- 1' Tarsal segments except for basal and terminal segments with apical parts flabellate, every tibia with a keel on outside, elytra without punctate-striae
..... ***Leiochrodes*** Westwood, 1883

Derispia Lewis

Type: ***D. maculipennis*** Lewis, 1894

Lewis, 1894, Ann. Mag. Nat. Hist., [6], 13(77): 389. - Kaszab, 1920, Nova Guinea, 13(3): 213-499, Pl. 9-11; id., 1939, loc. cit., (n. ser.), 3: 185-267; id., 1946, Verlag Ungar. Naturwiss. Mus., Budapest, III: 41-115, Pl. 1; id., 1961, Ann. Hist.-nat. Mus. Natio. Hungarici, 53: 357-380, 15 figs.; id., 1961, Acta Zool. Acad. Sci. Hungaricae, 7(1-2): 139-184, Figs. 1-48.; id., 1961, loc. cit., 7(3-4). - Miyatake, 1961, Trans. Shikoku Ent. Soc., 7(1-2): 33-39.

* Contribution from the Hikosan Biological Laboratory, Faculty of Agriculture, Kyushu University, Hikosan (Ser. 4, No. 16).

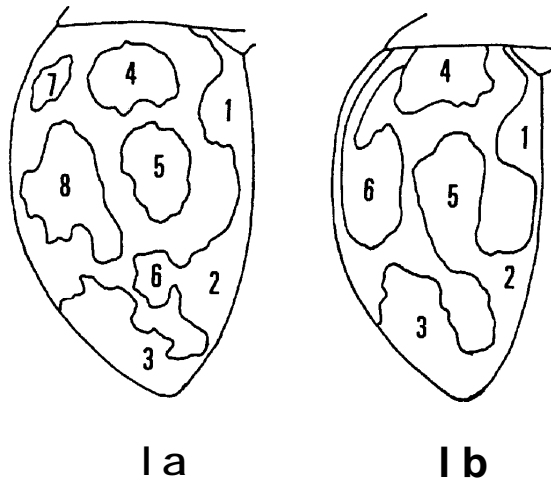


Fig. 1. Tentative numbers of left elytral maculae. la: *Derispia japonica* group; lb: *D. miyatakei*.

Key to the species of the genus *Derispia* from the Nansei Islands

- 1 Elytron with 6 spots as tentatively numbered as in Fig. 1a 2
 1' Elytron with 8 spots as tentatively numbered as in Fig. 1b 3
 2 Pronotum mostly black, no. 1 spot continuous with no. 5, 2.2mm
 *D. shibatai* Chûjô et Miyatake
 2' Pronotum wholly reddish brown, no. 1 spot separated from no. 5, 2.4–2.6mm
 *D. miyatakei* Masumoto
 3 Elytra with rather deep punctate-striae, interstices convex, 2.8–3.3mm
 *D. amamiana* Miyatake
 3' Elytra with very shallow punctate-striae, interstices scarcely convex 4
 4 Pronotum black except for marginal area, elytral interstices with a very fine and rather
 dense row of punctures on median part, no. 4 spot of elytral macula often very small,
 no. 7 sometimes completely reduced, 2.5–2.7mm *D. akitai* Masumoto
 4' Pronotum reddish brown or sometimes black in narrow part, elytral interstices with
 a row of punctures on median part, the punctures somewhat larger and sparser, nos.
 4 and 7 spots of elytral maculae of ordinary size each 5
 5 Antennae with 4th to 10th segments black, pronotum evenly brown, interstices with a
 row of punctures rather large and dense, nos. 6 and 8 spots of elytral maculae
 conjoined together in many individuals, 2.7–3.0mm
 *D. japonica yaeyamana* subsp. nov.
 5' Antennae with 5th to basal half of terminal segments black, pronotum darkened medio-
 posteriorly, interstices with a row of punctures much smaller and sparser, nos. 6 and
 8 spots of elytral maculae separated, 2.8–2.9mm *D. japonica japonica* Kaszab

Derispia akitai Masumoto, 1994

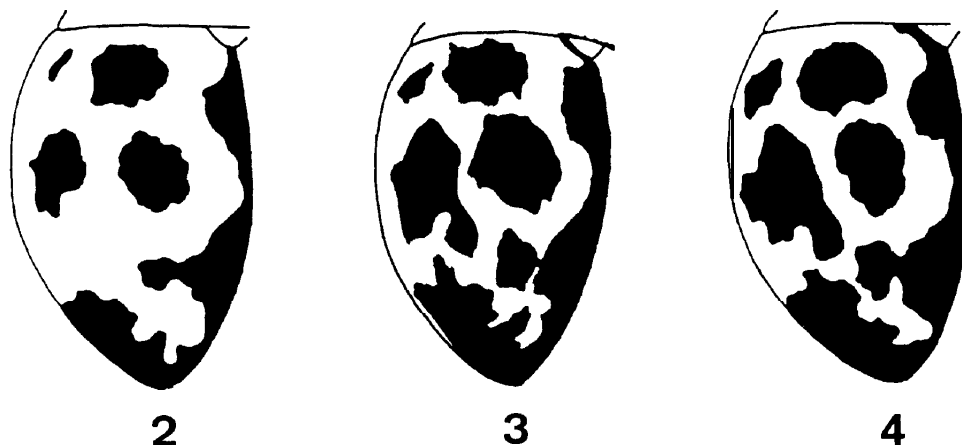
Derispia akitai Masumoto, 1994, Ent. Rev. Japan, 49(1): 42, Fig. 1 (Kumejima Is.).
Spec. exam.: 2 exs., Mt. Darumayama, Kumejima Is., Nansei Isls., 6-8. vi. 1994, T. Ueno leg.
Gen. distr.: Japan [Nansei Isls. (Kumejima Is.)].

Derispia amamiana Miyatake, 1961

Derispia amamiana Miyatake, 1961, Trans. Shikoku Ent. Soc., 7(1-2): 37-38, Figs. 3 & 7 (Amami-Oshima Is.). - Masumoto, 1994, Ent. Rev. Japan, 49(1): 44, Fig. 4.
= *japonica*: M. T. Chûjô, 1966, J. Fac. Agr., Kyushu Univ., 14(1): 16. - Nakane & Masumoto, 1969, Ins. & Nat., Tokyo, 4(8): 28. - M. T. Chûjô, 1977, Esakia, Kyushu Univ. Publ. Ent., (10): 9.
Spec. exam.: 2 exs. (Japan-U.S.), Yuwan, Amami-Oshima Is., 29-31. vii. 1963, Y. Hirashima leg.; 4 exs. (Japan. -U.S.), Yuwan, Amami-Oshima Is., 31. vii. 1963, Y. Hirashima leg.; 1 ex. (Japan-U.S.) (at light), Yuwan-dake, Amami-Oshima Is., 6. viii. 1963, T. Okada leg.; 12 exs., see M. T. Chûjô (1966); 3 exs., see M. T. Chûjô (1977).
Gen. distr.: Japan [Nansei Isls. (Amami-Oshima Is.)].

Derispia japonica japonica Kaszab, 1961

Derispia japonica Kaszab, 1961, Acta Zool. Acad. Sci. Hungaricae, 7(1-2): 160 & 181, Figs. 42, 43 & 46 (Okinawa-Honto Is.). - M. T. Chûjô, 1966, J. Fac. Agr., Kyushu



Figs. 2-4. Left elytral maculae of *Derispia* species. 2: *D. akitai* Masumoto; 3: *D. amamiana* Masumoto; 4: *D. japonica japonica* Kaszab.

Univ., 14(1): 16. - Nakane & Masumoto, 1969, Nat. & Ins., Tokyo, 4(8): 28. - M. T. Chûjô, 1978, Esakia, Kyushu Univ. Publ. Ent., (11): 65; id., 1978, loc. cit., (12): 5; id., 1979, loc. cit., (14): 38-39; id., 1985, Col. Japan, in Color, Hoikusha, Osaka, 3: 312, Pl. 52, Fig. 14. - Sawada, 1986, Coleopterist's News, Tokyo, (73): 3. - Hirashima et al., 1989, Check List, Jap. Ins., (1): 425. - Iwata & Ando, 1990, Coleopterist's News, Tokyo, (91): 7. - Asahina et al., 1995, Jpn. Wildlife Res. Center, Tokyo: 282.

Spec. exam.: 45 exs., Hyakuna, Okinawa-Honto Is., Ryukyus, 18. vi. 1970, H. Makihara leg.; 1 ex., Chinen, Okinawa-Honto Is., Ryukyus, 8. vii. 1977, H. Makihara leg.; 3 exs., Kudeken, Okinawa-Honto Is., Ryukyus, 20. iv. 1979, H. Makihara leg.; 10 exs., Agunijima Is., Ryukyus, 25. viii. 1989, T. Ueno leg.; 13 exs., Sueyoshi Park, Okinawa-Honto Is., Ryukyus, 4. vi. 1994, T. Ueno leg.; 3 exs., see M. T. Chûjô(1977); 37 exs., see M. T. Chûjô(1978).

Gen. distr.: Japan [Nansei Isls. (Amami-Oshima Is., Okinawa-Honto Is. and Agunijima Is.).

Derispia japonica yaeyamana subsp. nov.

This subspecies is closely related with *D. japonica* Kaszab, 1961, from Okinawa Is., but is distinguished by the following characters: antennae with 4th to 10th segments black, pronotum evenly brown, interstices with a row of punctures rather larger and denser, nos. 5 and 8 spots of elytral maculae often conjoined each other, no. 3 not reaching elytral margin.

Length: 2.6-3.0mm. Width: 2.2-2.6mm.

Holotype: male (Type no. 3045, preserved in Kyushu Univ.), Yonehara, Ishigakijima Is., Nansei Isls., 5-6. VII. 1993, H. Kojima leg. Paratopotypes: 7 males & 9 females, same collecting data as holotype. Paratypes: male & female (Japan-U. S. Co-op. Sci. Programme), Nakara-gawa, Iriomotejima Is., Nansei Isls., 5. x. 1993, K. Morimoto leg.; male & female (J. -U. S.), Yoshihara, Ishigakijima Is., Nansei Isls., 15. x. 1993, K. Morimoto leg.; male, Nakara River, Iriomotejima Is., Nansei Isls., 25-26. vi. 1970, H. Makihara leg.; male, Sonai, Iriomotejima Is., Nansei Isls., 6. iv. 1973, H. Irie leg.; male, Sonai, Iriomotejima Is., Nansei Isls., 4. v. 1974, H. Irie leg.; male, Kampire-fall, Iriomotejima Is., Nansei Isls., 14. iv. 1975, H. Irie leg.

Gen. distr.: Japan [Nansei Isls. (Ishigakijima Is. & Iriomotejima Is.).]

Derispia miyatakei Masumoto, 1994

Derispia miyatakei Masumoto, 1994, Ent. Rev. Japan, 49(1): 42-43 (Okinawa-Honto Is.).

Spec. exam.: 20 exs., Shikina, Okinawa-Honto Is., Nansei Isls., 1. vi. 1969, K. Iha leg.; 1 ex., Sueyoshi Park, Okinawa-Honto Is., Nansei Isls., 24. iv. 1988, T. Ueno leg.; 2 exs., Afuso, Onna V., Okinawa-Honto Is., Nansei Isls., 27. vi. 1990, T. Ueno leg.; 2 exs., Sueyoshi Park, Okinawa-Honto Is., Nansei Isls., 4. vi. 1994, T. Ueno leg.

Gen. distr.: Japan [Nansei Isls. (Okinawa-Honto Is.).]

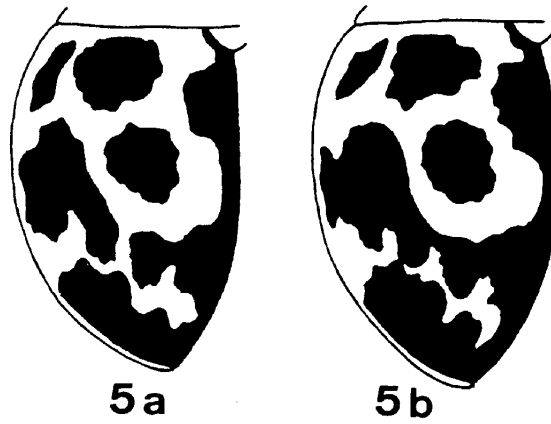


Fig. 5. Left elytral maculae of *Derispia japonica yaeyamana* subsp. nov. 5a: Separate type in rare case. 5b: Conjoined type in most cases.

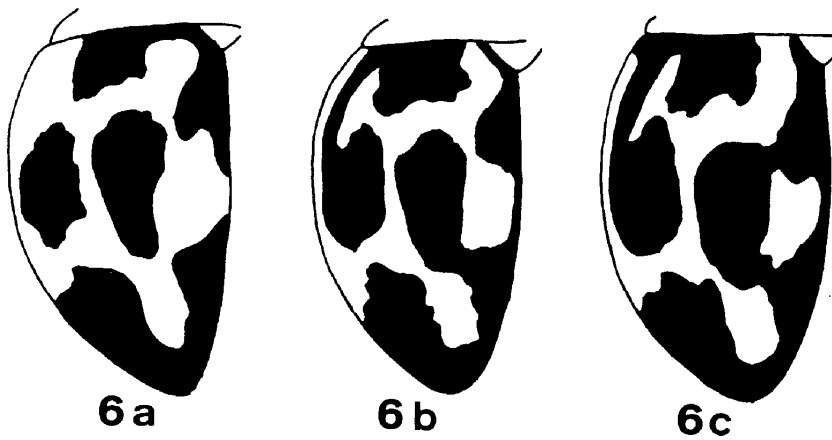


Fig. 6. Left elytral maculae of *Derispia miyatakei* Masumoto. 6a-c: Showing individual variations of maculae.

Derispia shibatai Chûjô et Miyatake

Derispia shibatai Chûjô et Miyatake, 1961, Trans. Shikoku Ent. Soc., 7(1-2): 35, 38-39, Figs. 4 & 8 (Amami-Oshima Is.). - Masumoto, 1994, Ent. Rev. Japan, 49(1): 43-44, Fig. 3.

=*klapperichi*: M. T. Chûjô, 1966, J. Fac. Agr., Kyushu Univ., 14(1): 16-17. - Nakane & Masumoto, 1969, Nat. & Ins., Tokyo, 4(8): 28. - M. T. Chûjô, 1977, Esakia, Kyushu Univ. Publ. Ent., (10): 9; id., 1978, loc. cit., (11): 65; id., 1985, Col. Japan in Color, 3: 312, Pl. 52, Fig. 15. - Hirashima *et al.*, 1991, Check List, Jap. Ins., 1: 425.

Spec. exam.: 1 ex. (J. -U. S.), Nakijin, Okinawa-Honto Is., Ryukyus, 12. iv. 1964, T. Takara leg.; 7 exs., Shikina, Okinawa-Honto Is., Ryukyus, 1. vi. 1985, H. Irie leg.; 1 ex., see M. T. Chûjô (1978).

Gen. distr.: Japan [Nansei Isls. (Amami-Oshima Is.).

Leiochrodes Westwood

Type: *L. fulvicollis* Westwood, 1883

Westwood, 1883, Tijdschr. Ent., 26: 69. - Lewis, 1894, Ann. Mag. Nat. Hist., [6], 13(77): 391. - Fairmaire, 1893, Ann. Soc. Ent. France, 62: 26; id., 1898, Ann. Soc. Ent. Belgique, 42: 482. - Kaszab, 1920, Nova Guinea, 13(3): 213-499, Figs. 9-11; id., 1939, loc. cit., (n. ser.), 3: 185-267; Verlag Ungar. Naturwiss. Mus., Budapest, III: 136184, Abb. 231-289.; id., 1961, Ann. Hist.-nat. Mus. Nat. Hungarici, 53: 358; id., 1961, Acta Zool. Acad. Sci. Hungaricae, 7(3-4): 433-466, 24 figs. - Miyatake, 1961, Trans. Shikoku Ent. Soc., 7(1-2): 33.

= *Leiochrota* Westwood, 1883, Tijdschr. Ent., 26: 70.

= *Ades* Guérin-Ménéville, 1857, in Th. Arch. Ent., 1: 277.

Leiochrodes convexus Lewis, 1894

Leiochrodes convexus Lewis, 1894, Ann. Mag. Nat. Hist., [6], 13(77): 391 (Japan: Honshu & Kyushu). - Kaszab, 1946, Verlag Ungar. Naturwiss. Mus., Budapest, III: 161-163; id., 1961, Ann. Hist.-nat. Mus. Nat. Hungarici, 53: 358; id., 1961, Acta Zool. Acad. Sci. Hungaricae, 7(3-4): 447. - Miyatake, 1961, Trans. Shikoku Ent. Soc., 7(1-2): 33 & 40. - Nakane & Masumoto, 1969, Nat. & Ins., Tokyo, 4(8): 28. - M. T. Chujô, 1985, Col. Japan in Color, 3: 313, Pl. 52, Fig. 17. - Hirashima *et al.*, 1989, Check List, Jap. Ins., 1: 425.

Spec. exam.: 1 ex., see M. T. Chûjô, 1985.

Gen. distr.: Japan [Honshu, Shikoku, Kyushu, Tsushima Is. & Nansei Isls. (Yakushima Is.)]; Formosa, Philippines & India.

ACKNOWLEDGEMENTS

I wish to express my appreciation to Prof. Dr. K. Morimoto, the head of Hikosan Biological Laboratory, for making this study possible and for his continual kind and valuable advices to my study. Also, I am thankful to Assoc. Prof. Dr. O. Tadauchi and Assist. Prof. S. Kamitani of Entomological Laboratory, Kyushu University for various help. I express my sincere thanks to the following entomologists: Dr. H. Hirashima, Mr. K. Iha, Mr. H. Makihara, Mr. H. Irie and Mr. T. Ueno, for offering of these valuable specimens. Particular thanks are due to Prof. Emeritus, Dr. M. Chûjô of Kagawa University for his various help to my study.

SELECTED REFERENCES

- Asahina, S. et al. 1995 *A Check List of Japanese Wildlife, Invertebrata II*. Japan Wildlife Res. Center, Tokyo, 620pp
- Iwata, R. and K. Ando 1990 Miscellaneous notes on the genus *Derispia*. *Coleopt. News, Tokyo*, (91): 7 (In Japanese)
- Chûjô, M. T. 1966 Taxonomic study of the Tenebrionidae (Coleoptera) of the Ryukyu Islands. *J. Fac. Agr., Kyushu Univ.*, 14: 1-32, 2 pls
- Chûjô, M. T. 1977 Tenebrionidae of the Nansei Islands II (Coleoptera). *Esakia*, (10): 1-19, 2 figs
- Chûjô, M. T. 1978 Tenebrionidae of the Nansei Islands III (Coleoptera). *Esakia*, (11): 63-80, 12 figs
- Chûjô, M. T. 1978 Tenebrionidae of the Nansei Islands IV (Coleoptera). *Esakia*, (12): 1-16, 3 figs
- Chûjô, M. T. 1979 Tenebrionidae of the Nansei Islands V (Coleoptera). *Esakia*, (14): 31-56, 5 figs
- Chûjô, M. T. 1982 Tenebrionidae of the Nansei Islands VII (Coleoptera). In "Spec. Iss. Mem. Retir. Emer. Prof. M. Chûjô". 87-101, 4 tabs (In Japanese)
- Chûjô, M. T. and K. Ando. 1985 Tenebrionidae. In "The Coleoptera of Japan in Color III", eds. by Y. Kurosawa, S. Hisamatsu and H. Sasaji, Hoikusha, Osaka. pp. 295-341, pls. 49-58 (In Japanese)
- Hirashima et al. 1989 *A Check List of Japanese Insects I*. Kyushu Univ. & Japan Wildlife Res. Center (eds.), 540pp
- Kaszab, Z. 1946 *Monographie der Leiochrinen*. Verlag des Ungarischen Naturwissenschaftlichen Museums, Budapest. 221pp
- Kaszab, Z. 1961 Beiträge zur Kenntnis der Tenebrioniden-Tribus Leiochrini (Coleoptera). *Ann. Hist.-nat. Mus. Nat. Hungarici*, 53: 357-380
- Kaszab, Z. 1961 Revision der Tenebrioniden-Gattung *Derispia* Lewis (Coleoptera). *Acta Zool. Acad. Sci. Hungar.*, 7: 139-184, 45 figs
- Kaszab, Z. 1961 Neue Arten der Gattung *Leiochrodes* Westwood (Coleoptera: Tenebrionidae). *Acta Zool. Acad. Sci. Hungar.*, 7: 433-466, 21 figs
- Kato, A. 1989 Tenebrionidae collected from Yonagunijima Island in February. *Coleopt. News, Tokyo*, (85): 7 (In Japanese)
- Kato, A. 1991 Four Tenebrionid species collected in Kuchino-erabujima Island. *Coleopt. News, Tokyo*, (94): 3, 1 fig (In Japanese)
- Lewis, G. 1894 On the Tenebrionidae of Japan. *Ann. Mag. Nat. Hist.*, 6, 13(77): 377-484, 4 figs
- Marseul, M. S. -A. de. 1876 Coléoptères du Japon recueillis par M. Lewis. *Ann. Soc. Ent. France*, 6(5): 93-142
- Masumoto, K. 1994 Note and descriptions of Japanese Tenebrionidae, VII (Coleoptera). *Ent. Rev. Japan*, 49(1): 41-46, 8 figs
- Miyatake, M. 1961 The tribe Leiochrini of Japan (Coleoptera: Tenebrionidae). *Trans. Shikoku Ent. Soc.*, 7(1-2): 33-40, 9 figs
- Nakane, T. 1951 Tenebrionidae. In "Iconographia Insectorum Japonicorum", Hokuryukan, Tokyo, Figs. 3283-3316 (In Japanese)
- Nakane, T. 1955 Tenebrionidae. In "Coloured Illustrations of the Insects of Japan (Col.)": Hoikusha,

- Osaka, Pl. 3, Figs. 778-801 (In Japanese)
- Nakane, T. 1963 Tenebrionidae. In "Iconographia Insectorum Japonicorum, Colore nat. edit., 2 (Col.)", Hokuryukan, pp. 219-234, Pls. 110-1 17 (In Japanese)
- Nakane, T. and K. Masumoto, 1969. A check list of Tenebrionidae of Japan (Coleoptera)(1). *Nature & Insects, Tokyo*, **4**(8): 23-29 (In Japanese)
- Nakane, T. and K. Masumoto, 1969 A check list of Tenebrionidae of Japan (Coleoptera)(2). *Nature & Insects, Tokyo*, **4**(9): 32-34 (In Japanese)
- Okadome, T. 1973 *The Insects Fauna of Yakushima Island, South Japan*. Yakushima Educ. Comm., Kumagegun, Kagoshima Pref., Japan. pp. 130-133 (In Japanese)
- Sawada, K. 1986 New records of Tenebrionidae from Nansei Islands. *Coleopt. News, Tokyo*, (73): 3 (In Japanese)
- Sawada, K. 1991 *Platydema nigropictum* Nakane collected in Ishigakijima Island. *Coleopt. News, Tokyo*, (95): 8 (In Japanese)