

## **An indexed, annotated bibliography of the Chinese- and Japanese-language papers on ticks and tick-borne diseases translated under the editorship of the late Harry Hoogstraal (1917-1986)**

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### **Abstract**

An annotated bibliography is presented describing the 40 Chinese- and Japanese-language tick papers known to have been selected for translation into English under the editorship of the late Harry Hoogstraal during his years at U.S. Naval Medical Research Unit Number Three (NAMRU-3) in Cairo, Egypt. The bibliography is followed by an index to all tick species, subspecies and varieties named in these papers, including junior synonyms, nomina dubia, misidentifications, and lapsus calamorum.

**Key words:** Hoogstraal bibliography, ticks, translations, Chinese, Japanese

### **Introduction**

During his long (1949-1986) tenure at U.S. Naval Medical Research Unit Number Three (NAMRU-3), Cairo, Egypt, the late Dr. Harry Hoogstraal (1917-1986) orchestrated and edited over 1,800 translations of scientific papers and books, largely from the Russian literature on ticks and tick-borne diseases. In all the years since Hoogstraal's death, no effort has been made to catalog these translations, and it now appears unlikely that such a catalog will ever be attempted. Moreover, because of the suddenness of his passing, uncertainty clouds the issue of exactly how many translations were completed and released to the many scientists and libraries on Hoogstraal's mailing list. Even those persons and organizations that maintained meticulous records of translations received may not possess entire collections of these works, whose subject matter varied so widely (frequent topics in addition to ticks include mammalogy, ornithology, culicidology, leishmaniasis, and chigger-borne rickettsiosis) that Hoogstraal may have tailored his mailings to the interests of individual recipients. Over the last decade, our correspondence with Hoogstraal's colleagues, and the senior writer's association with a major library of military medical entomology, have enabled us to gradually assemble what may be the most complete collection of Hoogstraal translations remaining in private hands. In addition, during the last four years of Hoogstraal's life, the senior writer helped edit 11 translations of Chinese and Japanese tick papers prepared by his wife Fu-meei Yeh Robbins; these are known to have been among the final translations issued by NAMRU-3 and have proved valuable in delimiting Hoogstraal's translation oeuvre.

The Hoogstraal translations were consecutively numbered from T1, and the highest number that we have found is T1810 (assigned to a Spanish paper on cattle ticks). However, our collection contains only 1,774 items. The difference between these figures—36—is small and likely represents translations that were never released, either because they were awaiting editing or had been incompletely translated at the time of Hoogstraal's death. Of greater interest is the number of non-Russian papers present. Although 1,593 (90%) of the translations in our collection are from Russian, the remaining 181 comprise 17 other languages (totals per language in parentheses): German (70), Chinese (21), Japanese (18), French and Polish (15 each), Czech (10), Bulgarian (8), Italian (7), Spanish (4), Danish (3), Arabic, Portuguese and Slovak (2 each), and Afrikaans, Dutch, Finnish and Serbo-Croatian (1 each). Herein we provide an indexed, annotated bibliography of the 40 Chinese and Japanese tick papers that Hoogstraal selected for translation, including two Chinese works (RR1 and RR2) that were “lost” after his death, but excluding one Japanese report (T67) on chiggers. All these papers would still be closed to the Anglophone acarological community were it not for Hoogstraal's love of the written word, in any language.

### Annotated bibliography

- Asanuma, K. (1954) Studies on ticks and bloodsucking mites infecting rats (genus *Rattus*) in Japan. Part 1. *Miscellaneous Reports of the Research Institute for Natural Resources*, Tokyo. No. 36, pp. 108-119. (T48, in Japanese. A discussion, accompanied by keys, of numerous mite genera and species parasitizing rats in Japan, with passing reference to the tick genera *Haemaphysalis* and *Ixodes*. Translator not identified; translation forwarded to Hoogstraal by Robert E. Kuntz, NAMRU-2, Taipei, Taiwan.)
- Asanuma, K. (1960) Host and distribution records of the soft tick, *Ornithodoros capensis* Neumann, in Japan. *Japanese Journal of Sanitary Zoology*, Tokyo 11, 94. (T66, in Japanese. Discussion of previous records of *O. capensis* from *Larus crassirostris* Vieillot, collected on Kabu Island, Yado City, Aomori Prefecture, and on Tsune Island, Shimane Prefecture, with new records from *Calonectris leucomelas* (Temminck) on Aogashima, Izu Islands, and from *Synthliboramphus antiquus* (Gmelin) in Hayama Town, Kanagawa Prefecture. The range of *O. capensis* in Japan thus extends from Aomori Prefecture in northernmost Honshu southward on the Pacific to the southernmost Izu Islands, and on the Sea of Japan to Shimane Prefecture. Translator not identified; translation forwarded to Hoogstraal by Robert E. Kuntz, NAMRU-2, Taipei, Taiwan.)
- Asanuma, K. & Fukuda, S. (1957) On the life-history of a tick, *Ixodes signatus*, infesting a black-tailed gull (*Larus crassirostris*) in Japan. *Japanese Journal of Sanitary Zoology*, Tokyo 8, 147-159. (T57, in Japanese. A detailed study of the life history of *I. signatus* Birula on Kabushima, Hachinoe City, Aomori Prefecture, Honshu, between 1951 and 1955. Translator not identified; translation forwarded to Hoogstraal by Robert E. Kuntz, NAMRU-2, Taipei, Taiwan.)
- Asanuma, K. & Kosaka, K. (1954) Notes on the occurrence in Japan of a tick, *Haemaphysalis wellingtoni*, collected from a Japanese gray thrush, *Turdus cardis cardis*. *Miscellaneous Reports of the Research Institute for Natural Resources*, Tokyo. No. 36, pp. 104-107. (T35, in Japanese. This first report of *H. wellingtoni* Nuttall & Warburton from Japan is based on two male specimens and includes a key to males of this and three other Japanese *Haemaphysalis* that possess a dorsal process on the third palpal segment: *H. bispinosa* Neumann [actually *H. longicornis* Neumann], *H. hystricis* Supino, and *H. ias* Nakamura & Yajima [possibly *H. cornigera* Neumann]. Translator not identified; translation forwarded to Hoogstraal by Robert E. Kuntz, NAMRU-2, Taipei, Taiwan.)

- Asanuma, K. & Kosaka, K. (1955) Notes on a tick, *Ixodes turdus* Nakatsuji, 1942, found on birds in Japan. *Bulletin of the Biogeographical Society of Japan*, Tokyo. Appendix to volumes 16-19 (Recent conceptions of Japanese fauna), pp. 192-196. (T50, in Japanese. A description of the female of *I. turdus*, with records of this species from 11 birds and one mammal, and keys to females of four species of *Ixodes* (*I. granulatus* Supino, *I. signatus* Birula, *I. turdus*, and *I. "sp. C"*) known to parasitize Japanese birds. Translator not identified; translation forwarded to Hoogstraal by Robert E. Kuntz, NAMRU-2, Taipei, Taiwan.)
- Asanuma, K. & Sakurai, N. (1958) On the seasonal occurrence of the tick *Haemaphysalis flava* on wild hares (*Lepus timidus brachyurus*) in the endemic area of Yato-boyo or tularemia in Chiba Prefecture, Japan (a preliminary note). *Miscellaneous Reports of the Research Institute for Natural Resources*, Tokyo. No. 48, pp. 28-38. (T46, in Japanese; English summary. Studies of the seasonal dynamics of all active stages of *H. flava* Neumann on *Lepus brachyurus* Temminck in Arakiyama, Isumi District, Chiba Prefecture, Honshu, between January and December 1956. Specimens of "*Ixodes japonicus*" [= *I. japonensis*] Neumann [a junior synonym of *I. ovatus*] are also reported. Translator not identified; translation forwarded to Hoogstraal by Robert E. Kuntz, NAMRU-2, Taipei, Taiwan.)
- Asanuma, K., Sakurai, N., Ohara, S., Odajima, H., Kosaka K. & Nakagawa, H. (1955) On the host and distribution records of a tick, *Haemaphysalis flava*, a dominant parasite of wild hares in Japan. *Miscellaneous Reports of the Research Institute for Natural Resources*, Tokyo. No. 37, pp. 127-128. (T49, in Japanese. A table of 15 mammal species and subspecies and 17 bird species from which the authors and others have collected one or more stages of *H. flava* Neumann throughout Japan. Translator not identified; translation forwarded to Hoogstraal by Robert E. Kuntz, NAMRU-2, Taipei, Taiwan.)
- Chang, P.-H. (1958a) A study of *Amblyomma cyprium* Neumann, 1899, collected from human body. *Acta Entomologica Sinica*, Beijing 8, 290-292. (T259, in Chinese. A detailed morphological description of an engorged female tick specimen, identified as *A. cyprium* [actually *A. testudinarium* Koch] and said to be the first record of this species from China, that had been removed from the anus of a farmer from Tung-tai County, Kiangsu [now Jiangsu] Province, on 17 April 1956. The tick had been attached for more than eight months and was initially thought to be a hemorrhoid. Author was in the Institute of Parasitology, Chinese Academy of Medical Science; translator not identified; translation forwarded to Hoogstraal by unidentified personnel from NAMRU-2, Taipei, Taiwan.)
- Chang, P.-H. (1958b) A case of tick infestation in the anus of the human body. *National Medical Journal of China*, Shanghai 44, 304-305. (T260, in Chinese. A concurrent publication of the data in T259, but with greater emphasis on the patient's medical condition and with those of his activities that might have predisposed him to tick parasitism. Author was in the Institute of Parasitology, Chinese Academy of Medical Science; translator not identified; translation forwarded to Hoogstraal by unidentified personnel from NAMRU-2, Taipei, Taiwan.)
- Chang, P.-H., Lou, W.-Y., Teng, C.-C. & Hsu, A.-C. (1964) Studies on tick infestation of domestic animals in Nanking. *Acta Zoologica Sinica*, Beijing 16, 132-138. (T304, in Chinese; English summary. Between April 1956 and December 1957, five species of ixodid ticks were collected from domestic mammals and birds in the Nanjing area of China: *Boophilus caudatus* (Neumann) [a junior synonym of *B. microplus* (Canestrini)], *Haemaphysalis bispinosa* Neumann [actually *H. longicornis* Neumann], *H. campanulata hoeppliana* Schulze, *Ixodes persulcatus* Schulze, and *Rhipicephalus h. haemaphysaloides* (Supino). Host infestation data, including sites of attachment, are provided for all five tick species, together with descriptions of the complete life cycle of *H. longicornis* and *R. h. haemaphysaloides* reared in the laboratory. Authors were in the Shanghai Second College of Medicine, Chung Ch'ing Nanchung Research Institute

- for Chinese Medicine, and Nanking Chiang Su [now Nanjing Jiangsu] Province Health Quarantine Station; translated by Jih-Ching Lien, NAMRU-2, Taipei, Taiwan.)
- Chao, C. H. (1958) Survey on rodents, fleas and ticks in the plague area of Chilin [= Jilin] Province. *Plague Series* 5, 30-35. (T600, in Chinese. A list, with hosts and provincial distributions, of seven ixodid tick species known from Jilin Province, China, as of 1956: *Dermacentor marginatus* (Sulzer), *D. nuttalli* Olenov, *D. silvarum* Olenov, *Haemaphysalis* sp., *Hyalomma detritum* Schulze, *Ixodes crenulatus* Koch, and *I. persulcatus* Schulze. Translated by Handle Wu and Jih-Ching Lien; forwarded to Hoogstraal by the Director, NAMRU-2, Taipei, Taiwan.)
- Ch'en, T. M. (1957) The extermination of ticks by Chinese medicine: a preliminary report. *National Medical Journal of China*, Shanghai 43, 451-452. (T261, in Chinese. Results of experiments testing the acaricidal effects of 12 Chinese medicines and 7 chemicals on undetermined tick species collected from human clothing and dogs. Ticks were exposed to solutions or powdered formulations of test substances, or to chemically impregnated gauze. Of all the chemicals tested, Rotenone was the most effective. Translator not identified; translation forwarded to Hoogstraal by unidentified personnel from NAMRU-2, Taipei, Taiwan.)
- Chikaki, H. & Otake, A. (1956) Ecology of ticks attacking cattle in a pasture. *Japanese Journal of Applied Zoology*, Tokyo 21, 53-62. (T101, in Japanese; English summary. A study of the seasonal succession of ticks on cattle conducted on the north side of Mt. Sambe in Ota City, Shimane Prefecture, Honshu, between 1952 and 1954. *Haemaphysalis bispinosa* Neumann [actually *H. longicornis* Neumann] is the principal parasite of cattle in this area, though small numbers of *H. inermis* Birula [actually *H. kitaokai* Hoogstraal] and *Ixodes ricinus* (Linnaeus) [actually *I. persulcatus* Schulze] were also collected. Translator not identified; translation forwarded to Hoogstraal by the Director, NAMRU-2, Taipei, Taiwan.)
- Kitaoka, S. & Fujisaki, K. (1972) On the winter-active ticks *Haemaphysalis kitaokai* Hoogstraal, 1969 and *H. megaspinosa* Saito, 1969. *Japanese Journal of Veterinary Science*, Tokyo 34 (supplement), 173-174. (T635, in Japanese. A brief report on investigations of the abundance of haemaphysalid ticks on Mt. Tanzawa, Kanagawa Prefecture, with respect to seasonal conditions and the ecology of cattle pastures. Translator and source of translation not identified.)
- Li, C.-C. (1960) The presence of *Argas persicus* Oken [sic], 1818 in Chapchar, Sinkiang. *Acta Entomologica Sinica*, Beijing 10, 142. (T233, in Chinese. A brief review of previous Chinese collections of *A. persicus* (Oken), and a description of a collection of 122 specimens from the nest areas of chickens and pigeons in Sinkiang Province [Xinjiang Uygur Autonomous Region]. Author was in the Department of Biology, Kunming Medical College, Yunnan Province; translator not identified; translation forwarded to Hoogstraal by unidentified personnel from NAMRU-2, Taipei, Taiwan.)
- Li, C.-C. & Chang, N.-K. (1964) A new record of *Haemaphysalis* from China. *Haemaphysalis aponommoides*. *Acta Zootaxonomica Sinica*, Beijing 1, 352-354. (T434, in Chinese; English summary. Morphological descriptions of male and female specimens of *H. aponommoides* Warburton, collected from the Asian water buffalo, *Bubalus bubalis* (L.), in Kunming, Yunnan Province, during March 1960. Translated by Jih-Ching Lien; forwarded to Hoogstraal by John H. Cross, NAMRU-2, Taipei, Taiwan.)
- Luh, P.-L. & Woo, W.-C. (1950) A list of Chinese ticks. *Acta Entomologica Sinica*, Beijing 1, 195-222. (T19, in Chinese; English summary. A list, with synonymies, preferred hosts and distribution, of 39 species, 7 subspecies, and 2 varieties of argasid and ixodid ticks known from China as of 1945: *Argas persicus* (Oken), *A. vespertilionis* (Latreille), *Amblyomma formosanum* Schulze [reported from Taiwan and therefore probably a junior synonym of *A. geoemydae* (Cantor)], *A. pseudolaeve* (Schulze) [a junior synonym of *Aponomma pattoni* Neumann], *A. sublaeve* Neumann [a junior synonym of *A. javanense* (Supino)], *A. testudinarium* Koch, *A.*

- testudinarium taivanicum* Schulze, *A. yajimai* Kishida [a junior synonym of *A. testudinarium*], *Boophilus australis* (Fuller) [a junior synonym of *B. microplus* (Canestrini)], *B. caudatus* (Neumann) [a junior synonym of *B. microplus*], *B. distans* Minning [a junior synonym of *B. microplus*], *B. sinensis* Minning [a junior synonym of *B. microplus*], *Dermacentor bellulus* (Schulze) [a junior synonym of *D. taiwanensis* Sugimoto], *D. birulai* Olenev [a junior synonym of *D. everestianus* Hirst], *D. everestianus*, *D. reticulatus* (Fabricius), *D. sinicus pallidior* Schulze, *D. sinicus sinicus* Schulze, *D. taiwanensis*, *Haemaphysalis birmaniae* Supino, *H. bispinosa* Neumann [actually *H. longicornis* Neumann], *H. campanulata* Warburton, *H. campanulata hoeppliana* Schulze, *H. cornigera* Neumann, *H. cornigera* variety *taiwana* Sugimoto [a junior synonym of *H. taiwana* Sugimoto], *H. flava* Neumann, *H. formosensis* Neumann, *H. hystricis* Supino, *H. japonica* Warburton, *H. japonica* variety *douglasi* Nuttall & Warburton, *H. nishiyamai* Sugimoto [a junior synonym of *H. hystricis*], *H. warburtoni* Nuttall, *Hyalomma detritum albipictum* Schulze, *H. detritum detritum* Schulze, *H. detritum perstrigatum* Schulze, *Ixodes acutitarsus* (Karsch), *I. angulatus* Kishida [having been collected from small insectivores, possibly a junior synonym of *I. pomerantzevi* Serdyukova], *I. japonensis* Neumann [a junior synonym of *I. ovatus* Neumann], *I. ricinoides* Nuttall [a junior synonym of *I. nuttallianus* Schulze], *I. ricinus* (Linnaeus) [Chinese collections are actually *I. persulcatus* Schulze], "*I. shinckikuensis*" [= *I. shinchikuensis*] Sugimoto [a junior synonym of *I. ovatus*], *I. simplex* Neumann, *I. taiwanensis* Sugimoto [a junior synonym of *I. ovatus*], *Rhipicephalus expeditus* Neumann [a junior synonym of *R. haemaphysaloides* (Supino)], *R. haemaphysaloides*, and *R. sanguineus* (Latreille). Translated by Charles A. Liu; forwarded to Hoogstraal by Robert E. Kuntz, NAMRU-2, Taipei, Taiwan, June 1959.)
- Nagahana, M. & Matuo, K. (1962) Two tick species parasitic on the human body. *Medicine and Biology*, Tokyo 62, 119-121. (T566, in Japanese. Descriptions of parasitism of a 66-year-old lumberman by a female specimen of *Amblyomma testudinarium* Koch, and of a 6-year-old girl by a female specimen of *Haemaphysalis bispinosa* Neumann [actually *H. longicornis* Neumann], both cases occurring in Kyoto Prefecture. Translator and source of translation not identified.)
- Nakamura, T. & Yajima, A. (1942a) On the life history of *Haemaphysalis bispinosa* Neumann, 1897. *Report of the Government Experiment Station for Animal Hygiene*, Tokyo. No. 19, pp. 21-33. (T297, in Japanese. A detailed description of the entire life cycle and the morphology of all stages of *Haemaphysalis bispinosa* Neumann [actually *H. longicornis* Neumann], based on reared material, with a list of known hosts and localities from which this tick has been collected. Translator not identified; translation forwarded to Hoogstraal by unidentified personnel from the 406<sup>th</sup> Medical Laboratory, U.S. Army, Japan.)
- Nakamura, T. & Yajima, A. (1942b) On the larval stages of four species of ticks of the family Ixodidae. *Report of the Government Experiment Station for Animal Hygiene*, Tokyo. No. 19, pp. 34-39. (T308, in Japanese. Morphological descriptions of the larvae of four Japanese tick species: *Dermacentor reticulatus* (Fabricius), reared from a female collected in Arasawa Village, Iwate Prefecture, Honshu; *Haemaphysalis bispinosa* Neumann [actually *H. longicornis* Neumann], reared from females collected in Aomori Prefecture, Honshu; *H. campanulata* Warburton, reared from females collected in Tokyo Prefecture, Honshu; and *Uroboophilus caudatus* (Neumann) [a junior synonym of *Boophilus microplus* (Canestrini)], reared from a female collected in Kumamoto Prefecture, Kyushu. Translator not identified; translation forwarded to Hoogstraal by unidentified personnel from the 406<sup>th</sup> Medical Laboratory, U.S. Army, Japan.)
- Okoshi, S., Kitano, N., Tomoda, I., Usui, M., Takashio, M., Suzuki, N. & Konishi, T. (1960) Examination of endo- and ectoparasites in dairy cattle in Miyake Island, especially on the inci-

- dence and clinical symptoms of piroplasmosis. *Japanese Journal of Veterinary Science*, Tokyo 22 (supplement), 471. (T443, in Japanese. Examination of 206 dairy cattle on Miyake Island, one of the Izu Islands, from 24 to 26 August 1959 yielded 75 *Haemaphysalis bispinosa* Neumann [actually *H. longicornis* Neumann] and 10 *H. cornigera* Neumann. Translator and source of translation not identified.)
- Ono, Z. (1967) A bird tick new to Japan: *Ixodes lividus* (C.L. Koch 1844) [sic]. *Japanese Journal of Sanitary Zoology*, Tokyo 18, 217. (T474, in Japanese. Descriptions of collections of *I. lividus* from nests of the Japanese sand martin, *Riparia riparia* (L.), and nearby vegetation examined between 1962 and 1966 in the suburbs of Abashiri City, Abashiri Prefecture, Hokkaido. Translator and source of translation not identified.)
- Sugimoto, M. (1935) On the Ixodoidea of Formosa. *Taiwan Hakubutsu Gakkai Kaiho* 3, 1-7. (T1791, in Japanese. The original description (pp. 5-7) of the male of *Dermacentor taiwanensis*. Translated by Fu-Meei Yeh Robbins; forwarded to Hoogstraal by Richard G. Robbins, National Institutes of Health, Washington, DC, USA.)
- Sugimoto, M. (1937) Notes on the ticks in the Formosan mountain reservation for the aborigines. *Journal of Central Society for Veterinary Medicine*, Tokyo 50, 303-340. (T11, in Japanese. Morphological descriptions, host lists, and statements of distribution for 12 tick taxa: *Amblyomma testudinarium* Koch, *Dermacentor atrosignatus* Neumann, *D. taiwanensis* Sugimoto, *Haemaphysalis flava* Neumann, *H. formosensis* Neumann, *H. hystricis* Supino, *H. inermis* Birula [possibly *H. kitaokai* Hoogstraal], *H. nishiyamai* Sugimoto [a junior synonym of *H. hystricis*], *Ixodes acutitarsus* (Karsch), *I. shinchikuensis* sp. nov. [a junior synonym of *I. ovatus* Neumann], *I. taiwanensis* Sugimoto [a junior synonym of *I. ovatus*], and *Margaropus annulatus australis* (Fuller) [a junior synonym of *Boophilus microplus* (Canestrini)]. Translated by Stephen Chen, NAMRU-2, Taipei, Taiwan; forwarded to Hoogstraal by Robert E. Kuntz, NAMRU-2, August 1958.)
- Teng, K.-F. (1955) Studies on the life history of *Haemaphysalis bispinosa* Neum. *Acta Entomologica Sinica*, Beijing 5, 165-180. (T17, in Chinese; English summary. Investigations of the development, phenology, behavior and morphology of *H. bispinosa* [actually *H. longicornis* Neumann] collected from or reared on cattle, goats and sheep in Beijing, China, between 1951 and 1953. Translated by Charles A. Liu; forwarded to Hoogstraal by Robert E. Kuntz, NAMRU-2, Taipei, Taiwan, April 1959.)
- Teng, K.-F. (1963) A new species of the genus *Dermacentor* (Ixodidae). *Acta Entomologica Sinica*, Beijing 12, 225-228. (T446, in Chinese; English summary. Original descriptions of the holotype male and allotype female of *D. abaensis* [a junior synonym of *D. everestianus* Hirst] collected from hybrid cattle, *Bos grunniens* L. x *B. taurus* L., near Malkeng, Aba Tribe Autonomous Area, Sichuan Province, China, in May 1961. Paratypes were also collected from cattle, as well as from *Ovis aries* L. and *Ursus thibetanus* G. [Baron] Cuvier, during May and August. Translated by Tsing C. Maa; forwarded to Hoogstraal by Nixon Wilson.)
- Teng, K.-F. (1973) Notes on some Chinese ticks of the genus *Ixodes* with descriptions of two new species (Acarina; Ixodidae). *Acta Entomologica Sinica*, Beijing 16, 73-81. (T736, in Chinese; English summary. Records of *Ixodes arboricola* Schulze & Schlotke, *I. canisuga* Johnston, *I. pomerantzevi* Serdyukova and *I. vespertilionis* Koch, all new for China, together with discussion of an additional collection of *I. simplex simplex* Neumann, and descriptions of two new species, *I. ochotonarius* Teng [a junior synonym of *I. hyatti* Clifford, Hoogstraal & Kohls] and *I. rangtangensis* Teng [a junior synonym of *I. moschiferi* Nemenz]. Translated by Jih-Ching Lien; forwarded to Hoogstraal by R. Watten, Director, NAMRU-2, Taipei, Taiwan.)
- Teng, K.-F. (1978) *Economic insect fauna of China. Fascicle XV: Acarina, Ixodoidea*. Beijing, Science Press, Academia Sinica. 174 pp. (T1786, in Chinese. Translation of a description (pp.

- 124-126) of the male and female of *Dermacentor taiwanensis* Sugimoto, based in part on Sugimoto's original description (1935, see above), including information on bionomics and distribution. Translated by Fu-Meei Yeh Robbins; forwarded to Hoogstraal by Richard G. Robbins, National Institutes of Health, Washington, DC, USA.)
- Teng, K.-F. (1981) A new species of *Amblyomma* from Hainan Island, China. (Acarina: Ixodidae). *Acta Zootaxonomica Sinica*, Beijing 6, 399-401. (T1570, in Chinese; English summary. Description of the holotype female of *A. hainanense*, collected in May 1974 on an undetermined species of snake. Morphological characters are provided for separating this species from *A. javanense* (Supino) and *A. laticaudae* Warburton. Author was in the Institute of Zoology, Academia Sinica, Beijing, where this paper was presented on 26 December 1979; translated by Fu-Meei Yeh Robbins; forwarded to Hoogstraal by Richard G. Robbins, National Institutes of Health, Washington, DC, USA.)
- Teng, K.-F. (1982a) On the subgenus *Alloceraea* of genus *Haemaphysalis* from China, with description of a new species (Ixodoidea: Ixodidae). *Acta Zootaxonomica Sinica*, Beijing 7, 46-48. (RR1, in Chinese; English summary. Collection data for *H. (A.) inermis* from Sichuan Province, and *H. (A.) aponommoides* Warburton from Fujian and Yunnan Provinces and Xizang Autonomous Region [Tibet], together with the original description of the holotype female of *H. (A.) primitiva*, collected in May 1957 in Peng County, Sichuan. Translated by Fu-Meei Yeh Robbins; forwarded to Hoogstraal at the time of his death by Richard G. Robbins, National Institutes of Health, Washington, DC, USA.)
- Teng, K.-F. (1982b) *Insects of Xizang (Tibet). Volume II: Acarina: Ixodoidea*. Beijing, Science Press, pp. 449-461. (RR2, in Chinese; English summary. The first comprehensive survey of the ticks of Tibet, with collection data, principal hosts and ranges for one argasid and 22 ixodids, including the new species *Ixodes moscharius*, as well as remarks on their ecology and biogeography. *Ornithodoros lahorensis* Neumann, *Boophilus microplus* (Canestrini), *Dermacentor everestianus* Hirst, *D. niveus* Neumann, *Haemaphysalis aponommoides* Warburton, *H. montgomeryi* Nuttall, *H. moschisuga* Teng, *H. nepalensis* Hoogstraal, *H. tibetensis* Hoogstraal, *H. warburtoni* Nuttall, *Ixodes acutitarsus* (Karsch), *I. arboricola* Schulze & Schlottke, *I. crenulatus* Koch, *I. granulatus* Supino, *I. moscharius* Teng, *I. nuttallianus* Schulze, *I. ovatus* Neumann, *I. persulcatus* Schulze, *I. rangtangensis* Teng [a junior synonym of *I. moschiferi* Nemenz], *I. tanuki* Saito, *I. (Scaphixodes) sp.*, *Rhipicephalus haemaphysaloides* (Supino), and *R. sanguineus* (Latreille). Translated by Fu-meei Yeh Robbins; forwarded to Hoogstraal at the time of his death by Richard G. Robbins, National Institutes of Health, Washington, DC, USA.)
- Teng, K.-F. (1982c) The geographic distribution of the genus *Dermacentor* in China. *Sinozoologia*, Beijing. No. 2, pp. 211-216. (T1790, in Chinese; English summary. Descriptions and maps of the ranges within China of 13 species of *Dermacentor* known from that country: *D. abaensis* Teng [a junior synonym of *D. everestianus* Hirst], *D. asper* Arthur, *D. auratus* Supino, *D. coreus* Itagaki, Noda & Yamaguchi [a junior synonym of *D. silvarum* Olenev], *D. everestianus*, *D. marginatus* (Sulzer), *D. niveus* Neumann, *D. nuttalli* Olenev, *D. pavlovskyi* Olenev, *D. reticulatus* (Fabricius), *D. silvarum*, *D. sinicus* Schulze, and *D. taiwanensis* Sugimoto. Notes are provided on the principal habitats of these species and their extralimital distribution. Translated by Fu-Meei Yeh Robbins; forwarded to Hoogstraal by Richard G. Robbins, National Institutes of Health, Washington, DC, USA.)
- Teng, K.-F. (1983) Notes on Chinese ticks of the subgenus *Argas* (Acarina: Argasidae: *Argas*). *Acta Zootaxonomica Sinica*, Beijing 8, 255-261. (T1775, in Chinese; English summary. The original description of the male, female, preimaginal nymph, and larva of *A. (A.) beijingensis*, collected in roosts of *Columba livia* (Gmelin) in the Shijing Mountain region of Beijing, China, on 5 April 1955. Chinese records of three other members of subgenus *Argas*—*A. (A.) assimilis*

- Teng & Song, A. (*A.*) *japonicus* Yamaguti, Clifford & Tipton, and A. (*A.*) *vulgaris* Filippova—are also discussed, and a key is provided to separate all four Chinese members of the subgenus *Argas* from one another and from the other three Chinese species of *Argas*: A. (*Carios*) *vesperilionis* (Latreille), A. (*Persicargas*) *persicus* (Oken), and A. (*P.*) *robertsi* Hoogstraal, Kaiser & Kohls. Translated by Fu-Meei Yeh Robbins; forwarded to Hoogstraal by Richard G. Robbins, National Institutes of Health, Washington, DC, USA.)
- Teng, K.-F. (1984) On the distribution, hosts and immature stages of *Haemaphysalis moschisuga* Teng (Acarina: Ixodidae). *Acta Zootaxonomica Sinica*, Beijing 9, 219-221. (T1777, in Chinese; English summary. The nymph and larva of *H. moschisuga* are described, together with the known range of this exclusively Chinese species and the hosts of all active stages. Translated by Fu-Meei Yeh Robbins; forwarded to Hoogstraal by Richard G. Robbins, National Institutes of Health, Washington, DC, USA.)
- Teng, K.-F. & Cui, Y.-Q. (1984a) Descriptions of a new species of *Haemaphysalis* and the male of *H. primitiva* Teng, 1982, from Yunnan (Acarina: Ixodidae). *Acta Zootaxonomica Sinica*, Beijing 9, 37-40. (T1776, in Chinese; English summary. The holotype male of *H. (Kaiseri-ana) anomaloceraea* is described from Lushui County, Yunnan Province, China, and, from the same locality, the male of *H. (Alloceraea) primitiva* is described for the first time. Translated by Fu-Meei Yeh Robbins; forwarded to Hoogstraal by Richard G. Robbins, National Institutes of Health, Washington, DC, USA.)
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- Teng, K.-F. & Song, J.-Y. (1983) A new species of *Argas* from Jiangxi, China (Acarina: Argasidae). *Acta Zootaxonomica Sinica*, Beijing 8, 153-156. (T1774, in Chinese; English summary. The male, female, and preimaginal nymph of A. (*A.*) *assimilis* are described and illustrated from specimens collected by the junior author in nests of *Hirundo daurica japonica* Temminck & Schlegel in Tonggu County, Jiangxi Province, China, on 9 November 1980. Morphological characters are given for separating this new tick species from A. (*A.*) *japonicus* Yamaguti, Clifford & Tipton. Translated by Fu-Meei Yeh Robbins; forwarded to Hoogstraal by Richard G. Robbins, National Institutes of Health, Washington, DC, USA.)
- Tsou, Y.-S., Chao, C.-H. & Wang, M. (1959) Isolation of plague bacillus (*Pasteurella pestis*) from *Haemaphysalis* and *Dermacentor* ticks. *Acta Microbiologica Sinica*, Beijing 7, 205-208. (T59, in Chinese. Reports of plague isolations from undetermined species of *Dermacentor* and *Haemaphysalis* collected from healthy and plague-infected *Spermophilus dauricus* Brandt between 1955 and 1958, at localities believed to be in Jilin Province, northeastern China. Translator and source of translation not identified.)
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Yajima, A. (1955) On two new species of ticks from Iwate Prefecture. *Japanese Journal of Sanitary Zoology*, Tokyo 6, 52-53. (T349, in Japanese. Descriptions of the females of two unnamed but supposedly new Japanese tick species: an *Ixodes* collected in Kawai Village, and a *Haemaphysalis* collected in Shibutami Village. In a footnote, Hoogstraal states that the *Ixodes* sp. refers to *I. happinus* Yajima [a *nomen dubium*] and appears actually to be *I. acutitarsus* (Karsch), while the *Haemaphysalis* sp. refers to *H. shibutamiensis* Yajima [another *nomen dubium*]. Both specimens were collected from calves; Iwate Prefecture is in northern Honshu. Translated by Makato Niwa at the Rocky Mountain Laboratory, Hamilton, Montana; edited and forwarded to Hoogstraal by Glen Milton Kohls, also of the Rocky Mountain Laboratory; re-edited by Hoogstraal.)

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(includes junior synonyms, nomina dubia, misidentifications, and lapsus calamorum, as explained in the annotations)

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