

## REFERENCES

- Academia Sinica, (1978). Chinese fossils of all groups. Fossil plants of China, Fasc. III. Cenozoic plants of China. 232 pp., 149 pls. Academia Sinica, Sci. Press, Peking, (in Chinese).
- Akamine, H., (1954). Geology of the environs of Seto, with special reference to the sedimentary condition of the formation containing ceramic clays and lignite. *Miscell. Rep. Res. Inst. Nat. Resources*, **34**: 25-39 (in Japanese with English abstract).
- Akima Collaborative Research Group, (1971). The Neogene System in the northern part of Annaka City, Gunma Prefecture. *Earth Sci.*, **25**(5): 219-226, (in Japanese with English abstract).
- & Joetsu Nanbu Green Tuff Research Group, (1976). Volcanic activity from the Miocene to Pliocene age in the western part of Gunma Prefecture, Central Japan. *Earth Sci.*, **30**(2): 67-72 (in Japanese with English abstract).
- Arai, F. and Kizaki, Y., (1958). On the Tertiary formations characterized by Green Tuffs developed in the south of Tanigawa-dake, Jyoetsu district, Pt. 1. -Descriptions of the Minakami and Sarugakyo Groups. *Jubilee Pub. Commem. Prof. H. Hujimoto Sixtieth Birthday*, p. 213-219 (in Japanese with English abstract).
- Bailey, I. W. and E. W. Sinnott, (1915). A botanical index of Cretaceous and Tertiary climates. *Science* **41**: 831-834.
- and —, (1916). The climatic distribution of certain types of Angiosperm leaves. *Amer. Jour. Bot.* **3**(1): 24-36.
- Brongniart, A., (1828). *Prodrome d'une histoire des végétaux fossiles*. 222 pp., Paris.
- , (1833). Notice sur une Conifère fossiles du terrain d'eau de l'ile d'Iliodroma. *Ann. Sci. Nat. Bot.*, **30**: 168-176.
- Bronn, H. G., (1838). *Lethaea Geognostica* 2.
- Brown, R. W., (1935). Miocene leaves, fruits and seeds from Idaho, Oregon and Washington. *Jour. Paleont.*, **9**: 572-587, pls. 67-69.
- Chaney, R. W., (1951). A revision of fossil *Sequoia* and *Taxodium* in western North America based on the recent discovery of *Metasequoia*. *Trans. Amer. Phil. Soc.*, N. S., **40**: 171-239, pls. 1-12.
- and Sanborn, E. I., (1933). The Goshen flora of west central Oregon. *Carnegie Inst. Wash. Pub.* 439.
- Chiji, M. and Konda, I., (1978). Planktonic foraminiferal biostratigraphy of the Tomioka Group and the Nishiyatsushiro and Shizukawa Groups, Central Japan, with some considerations on the Kaburan Stage (Middle Miocene). *Cenozoic Geology of Japan (Prof. N. Ikebe Mem. Vol.)*: 74-92, pls. 1, 2.
- Czeczotto, H. and Skirgietto, A., (1967). The fossil flora of Turow near Bogatynia, and Part. Systematic description of plant remains (3). *Prace Muz. Ziemi*, Warszawa, (10): 97-166, pls. 1-10 (in Polish and English).
- Dolph, G. E. and Dilcher, D. L., (1979). Foliar physiognomy as an aid in determining paleoclimate. *Palaeontographica*, B, **170**: 151-172.
- Endo, S., (1933). Cenozoic plants of Japan. Additional note. *Iwanami-koza*, 31-50. Iwanami Shoten, Tokyo (in Japanese).
- , (1934). Discovery of *Liriodendron* leaves from the Neogene of Japan. *Proc. Imp. Acad.*, **10**: 590-593.
- , (1948). Plant fossils from Tyausuyama, Nagano Prefecture. *Jour. Geol. Soc. Japan*, **54**: 132-133 (in Japanese).
- , (1950a). On the fossil *Acer* from Japan, Korea and south Manchuria. I. *Short Papers I. G. P. S.*, (1): 11-17, pl. 3.
- , (1950b). On the fossil *Carpinus* from Japan and Korea. *Ibid.*, (2): 51-57, pl. 6.
- , (1951). On the fossil *Acer* from Japan, Korea and South Manchuria. II. *Ibid.*, (3): 51-58, pl. 8.
- , (1955). Icons of fossil plants from Japanese Islands. 103 pp. Sangyo Toshio Co., Ltd. Tokyo (in Japanese).
- , (1963). On the genus *Acer* with description of new species. *Trans. Proc. Palaeont. Soc. Japan*, N. S., (50): 65-69, pl. 10.
- , (1966). On the genus *Tilia* from the *Woodwardia* zone of Hokkaido, with description of two new species. *Ibid.*, (61): 188-190, pl. 23.
- and Okutsu, H., (1936). *Glyptostrobus* cone from the *Liriodendron* bed near Sendai. *Proc. Imp. Acad. Tokyo*, **12**: 138-140.
- Ettingshausen, C., (1886). Beiträge zur Kenntniss der Tertiärflora australiens. *Kgl. Akad. Wiss. Wien Denkschr.*, 53 : 81-142, pls. 8-15

- Florin, R., (1920). Zur Kenntnis der jungtertiären Pflanzenwelt Japans. *Kg. Sv. Vet.-Akad. Handl.*, **61**(1) : 1-71, pls. 1-6.
- Fukuta, O., (1963). The stratigraphy based on the Kasukabe borehole. *Bull. Geol. Surv. Japan*, **14**(4) : 95-96 (in Japanese).
- and Ishiwada, Y., (1964). Geology of the Kwanto area, with an introduction to exploration and development of its natural gas deposits. *Assoc. Petrol. Technol., Jour.* **29**(1) : 1-21 (in Japanese with English abstract).
- Geological Survey of Japan, (1969). Geological maps of oil and gas field of Japan, 8, Motojuku, 1 : 25,000.
- , (1977). Geology and mineal resources of Japan. 430pp.
- , (1978). Geological map of Japan. 2nd ed. 1 : 1,000,000.
- Hatai, K. and Masuda, K., (1962). Megafossils from near Higashi-Matsuyama City, Saitama Prefecture, Japan. *Trans. Proc. Palaeont. Soc. Japan*, N. S., (46) : 254-262.
- Hayashi, M. and Jujii, M., (1985). Statistical procedure to estimate the presence of detritus grains from the grain-by-grain fission track dating data. *Jour. Geol. Soc. Japan*, **91**(6) : 403-409 (in Japanese with English abstract).
- Hayashi, T., (1975). Fossils from Chojabara, Iki Island. 117 pp. Insular Sci. (in Japanese).
- Heer, O., (1855). Flora tertiaria helveticae, I. 117 pp., 50 pls. Winterthur.
- Hirabayashi, T., (1966). Provenance of the Tertiary conglomerates east of the Matsumoto Basin, Nagano Prefecture. *Jour. Geol. Soc. Japan*, **72** : 191-203 (in Japanese with English abstract).
- , (1970). Neogene conglomerates and Cenozoic geohistory of the northern Fossa Magna in central Japan (part 1, 2). *Earth Sci.*, **24**(3) : 79-92, 115-128.
- Homma, T., (1987). Miocene series along the middle part of the River Ara-Kawa, in the northeastern marginal area of the Kanto Mountains, Central Japan (Part 3) —Sedimentary facies and stratigraphy of the Yagii Formation—. *Bull. Saitama Mus. Nat. Hist.*, (5) : 23-48, (in Japanese with English abstract).
- Honma, F., (1931). Geology of Central Shinano. Part I-III, pp. 1-331. Kokin Shoin, Tokyo (in Japanese).
- Horikawa, Y., (1968). Natural vegetation map of Japan. *Jour. Yasuda Women's Univ.*, 1968(2) : 71-75.
- Honda, S., (1912). [Revised forest vegetation zones in Japan]. Honda Zoringaku Zenron, 3. 400 pp. Miura-shoten, Tokyo (in Japanese).
- Hu, H. H. and Chaney, R. W. (1938). A Miocene flora from Shantung province, China. Part 1. *Palaeont. Sinica*, N. S. A. 1 : 1-82, pls. 1-50.
- Huzimoto, H., and Kobayashi, M., (1938). On the Tertiary formations along the course of the Usuigawa and Kaburagawa, Gumma Prefecture. *Jour. Geol. Soc. Japan*, **45** : 205-226, pls. 6, 7. (in Japanese).
- Huzioka, K., (1938). Note on some Neogene plants from the island of Heigun, Yamaguchi Pref., with description of two new species of the genera *Carpinus* and *Sassafras*. *Jour. Fac. Sci., Hokkaido Imp. Univ.*, ser. 4, 4(1-2) : 147-152.
- , (1943). Note on some Tertiary plants from Tyosen. I. *Ibid.*, **7**(1) : 117-141, pls. 21-25.
- , (1954). Notes on some Tertiary plants from Korea (Tyosen). IV. *Trans. Proc. Palaeont. Soc. Japan*, N. S., (15) : 195-200. p1. 25.
- , (1963). The Utto flora of northern Honshu. *Tertiary Floras of Japan, I. Miocene Floras. Collab. Assoc. Comm. 80th Ann. Geol. Surv. Japan*, 153-216, pls. 28-40.
- , (1964). The Aniai flora of Akita Prefecture, and the Aniai-type floras in Honshu, Japan. *Jour. Mining Coll., Akita Univ.*, Ser. A. **4**(4) : 1-105, pls. 1-17
- and Nishida, S., (1960). The Seki flora of the Island of Sado, Japan. *Publ. Sado Mus.*, **3** : 1-26, pls. 1-7 (in Japanese with English abstract.)
- and Suzuki, Keiji, (1954). The flora of the Shiotsubo Formation of the Aizu lignite field, Hukushima Pref., Japan. *Trans. Proc. Palaeont. Soc. Japan*, N. S. (14) : 133-142, pl. 16.
- and Uemura, K., (1973). The Late Miocene Miyata flora of Akita Prefecture, Northeast Honshu, Japan. *Bull. Natn. Sci. Mus.*, **16**(4) : 661-738, pls. 1-18.
- and —— (1974). The Late Miocene Sanzugawa flora of Akita Prefecture, Northeast Honshu, Japan. *Ibid.*, **17**(4) : 325-366, pls. 1-11.
- Iijima, N., (1962). Volcanostratigraphy and petrology in northeastern Fossa-Magna, (1), Volcanostratigraphy. *Jour. Fac. Educ. Shinshu Univ.*, **12** : 86-133, (in Japanese with English abstract).
- , Taguchi, K., Ishiwa, K., Kouda, M., Nakamura, J., Kifune, K., Kobayashi, M., Yano, K., and Yamagishi, I., (1958). Volcanoes and its basement in eastern Fossa-Magna. *Earth Sci.*, **37** : 46-59 (in Japanese with English abstract).
- Ikebe, Y., and Tsuchi, R. eds., (1984). Pacific Neogene Datum Planes. 288p., Univ. Tokyo Press, Tokyo.
- Katahira, T. and Miyazaki, H., (1978). Some problems on petroleum geology in Japan. *Cenozoic Geology of Japan (Prof. N. Ikebe Mem. Vol.)* : 205-216, (in Japanese with English abstract).
- Ina, H., (1977). [Plant fossils from the Hiramaki Formation]. Geology and Paleontology of Kani Town, Central Japan, pp. 47-102, pls. 1-29. Educ. Commit. Kani-machi, Gifu Pref. (in Japanese).
- , (1981). Miocene fossils of the Mizunami group, central Japan. 1. Plants of the Kani and Mizunami basins. *Monogr. Mizunami Fos. Mus.*, (2) : 1-20, pls. 1-40 (in Japanese).

- Ishida, S., (1970). The Noroshi flora of Noto Peninsula, Central Japan. *Mem. Fac. Sci., Kyoto Univ.*, Ser. Geol. & Mineral., **37**(1) : 1-112, pls. 1-22.
- and Yokoyama, T., (1969). Tephrochronology, paleogeography and tectonic development of Plio-Pleistocene in Kinki and Tokai districts, Japan.—the Research of younger Cenozoic strata in Kinki Province, Part 10—. *Quart. Res.*, **8**(2) : 31-43, (in Japanese with English abstract).
- Itoigawa, J., (1971). Research on the Seto Group, Part 2 —The stratigraphy of the Tokoname Formation in the environs of the Chita Peninsula, Japan.—The Pliocene and Pleistocene in Central District of Japan, pp. 83-93, (in Japanese with English abstract).
- Iwasaki, Y., (1970). The Shiobara-type molluscan fauna. An ecological analysis of fossil molluscs. *Jour. Fac. Sci., Univ. Tokyo, Ser. 2*, **17** : 351-444.
- Japan Assoc. Quat. Res., ed., (1977). The Quaternary Period : recent studies in Japan. 416 pp., Univ. Tokyo Press, Tokyo.
- Japan Meteorological Agency, (1972). The monthly normals of temperature and precipitation at climatological stations in Japan (1941-1970). *Japan Meteorol. Agency, Tech. Data Ser.* no. 36, pp. 209.
- , (1982). The monthly normals of temperature and precipitation at climatological stations in Japan (1951-1978). *Japan Meteorol. Agency, Tech. Data Ser.* no. 46, 205pp.
- Joetsu Nanbu Green Tuff Research Group, (1976). On the Green Tuff formations of the southwestern part of Sarugakyo, Gunma Prefecture. *Mem. Geol. Soc. Japan*, **13** : 251-260, (in Japanese with English abstract).
- , (1981), Neogene system distributed at the northern part of Gunma Prefecture, with special reference to the collapsed structure developed at the northern part of the Nakanojo area and its geological implication. *Earth Sci.*, **30**(5) : 219-230, (in Japanese with English abstract).
- Johnston, T., (1937). Notes on the Tertiary flora of Scotland. *Edinburg Bot. Soc. Proc.*, **32** (2) : 330-331, pl. 21.
- Kaneoka, I., Matsubayashi, O. Zashu, S., and Aramaki, S., (1979), K-Ar ages of Late Tertiary volcanic rocks in the Asama area. *Jour. Geol. Soc. Jap.*, **85**(8) : 547-549.
- Kato, H., (1980). Geology of the Sakaki district. Quadrangle Series, scale 1 : 50,000, Geol. Surv. Japan, 57 pp. (in Japanese with English summary).
- and Akahane, S., (1986). Geology of the Nagano district. Quadrangle Series, scale 1 : 50,000, Geol. Surv. Japan, 120 pp. (in Japanese with English summary).
- and Sato, T., (1983). Geology of the Shinano-Ikeda district. Quadrangle Series, scale 1 : 50,000, Geol. Surv. Japan, 93 pp. (in Japanese with English summary).
- Kawachi, S. and Kawachi, Y., (1963). Volcanisms of the Kirigamine and the Arafune areas after Pliocene I & II—with special reference to the existence of the “Setouchi” factor in the middle part of the “Fossa Magna”—. *Earth Sci.*, **64** : 1-7, 33-37 (in Japanese with English abstract).
- Kawamoto Fossil Forest Research Group, (1983), Neogene fossil forest on the northern margin of the Kanto Mountains, Central Japan. *Earth Sci.* **37**(3) : 178-181 (in Japanese).
- Kimura, J. and Hayashi, Y., (1988). Pliocene-Pleistocene Series of the Hijiriyyama, Nagano Prefecture, Central Japan. *Earth Sci.*, **42**(2) : 43-60, (in Japanese with English abstract).
- Kira, T., (1976). Rikujou Seitaikei —Gairon—. *Seitaigakukouza*, 2. 166 pp., Kyoritsu Pub. Co., Tokyo (in Japanese).
- Kizaki, Y., (1965). Diagenetic alteration of Tertiary tuffs of southern Gunma Prefecture. *Sci. Rep. Gunma Univ.*, **13** : 153-203, (in Japanese with English abstract).
- Kobayashi, M., (1935). Geology around Matsuyama-cho, northwestern Kwanto Plane. *Jour. Geogr.*, **47**(555) : 211-224, (in Japanese with English abstract).
- Kobayashi, I. and Isomi, H., (1950). Geology of the Sarashina and Higashi-Chikuma district in Nagano-Coal Field, Nagano Prefecture. *Rep. Geol. Surv. Japan*, No. 135, 26 pp. (in Japanese with English summary).
- Kon'no, E., (1931). The Neogene fossil plants from Central Shinano. In Honma, F. ed., Geology of Central Shinano, Part. IV, pp. 91-155, pls. 1-24, (in Japanese).
- Kovats, J., (1851). Fossile Flora von Erdöbenye. *Jahrb. K. K. Geol. Reichsanst.*, 2 Jahrg., Abt, 1.
- , (1856). Fossile Flora von Erdöbenye und Täillya. *Arb. Geol. Gesell. Ungarn*, **1** : 1-37, pls. 1-7.
- Kryshťofovich, A. N., (1930). Contribution to the Tertiary flora of the Shinano and Tajima province, Japan. *Ann. Soc. Paleont. Russ.*, **8** : 11-34, pls. 2-4 (in Russian).
- Kuwahara, T., (1971). Sedimentary facies of the Seto Group. The Pliocene and Pleistocene in Central District of Japan. Prof. Heiichi Takehara Mem. Vol., pp. 113-127, (in Japanese).
- MacGinitie, H. G., (1941). A Middle Eocene flora from the central Sierra Nevada. *Carnegie Inst. Wash. Pub.*, (534) : 178 pp., 47 pls.
- Makinouchi, T., (1975). The Tokoname Group in the southern part of the Chita Peninsula, Central Japan. *Jour. Geol. Soc. Japan*, **81**(2) : 67-80, (in Japanese with English abstract).
- , (1985). Some problems in the generation stage of the “Second Setouchi sedimentary province”, with special reference to the sedimentary basin of Lake Tokai. *Monogr. Assoc. Geol. Collab. Japan*, **29** : 53-64 (in Japanese with English abstract).
- , Danhara, T. and Isoda, K., (1983). Fission-track ages of the Tokai Group and associate formations in the east coast areas of Ise Bay and their significance in geohistory. *Jour. Geol. Soc. Japan*, **89**(5) : 257-270

- (in Japanese with English abstract).
- Matsubayashi, O., (1975). K-Ar age of Shiga welded tuff, Nagano Prefecture, Japan. *Rock Magn. Paleogeophys.*, **3**: 79-80.
- Matsumaru, K., (1967). Geology of the Tomioka area, Gunma Prefecture, with a note on "Lepidocyclina" from the Abuta Limestone Member. *Sci. Rep. Tohoku Univ.*, 2nd. Ser. **39**(2): 113-147.
- , (1977). Neogene stratigraphy of the northern to northeastern marginal areas of the Kwanto Mountain-land, Central Japan. *Jour. Geol. Soc. Japan*, **83**(4): 213-225, (in Japanese with English abstract).
- and Hayashi, A., (1980). Nogene stratigraphy of the eastern marginal areas of Kanto Mountains, Central Japan. *Ibid.*, **86**(4): 225-242, (in Japanese with English abstract).
- , Hayashi, A., Matsuo, Y. and Kishi, R., (1982). Discovery of *Miogypsina* from the Moriya Formation of Northern Fossa Magna, Japan and its geohistorical significance. *Ibid.*, **88**(8): 699-700, (in Japanese with English abstract).
- Miki, S., (1937). Plant fossils from *Stegodon* beds and *Elephas* beds near Akashi. *Japan. Jour. Bot.*, **8**: 304-341, pls. 8, 9.
- , (1939). On the remains of *Pinus trifolia* n. sp. in the Upper Tertiary from Central Honshu in Japan. *Bot. Mag.*, **53**(630): 239-248.
- , (1941). On the change of flora in Eastern Asia since Tertiary Period (1). The clay or lignite beds flora in Japan with special reference to the *Pinus trifolia* beds in Central Hondo. *Jap. Jour. Bot.*, **11**: 237-303.
- , (1948). Floral remains in Kinki and adjacent districts since the Pliocene with description 8 new species. *Mineral and Geology*, **2**(9): 105-144, (in Japanese with English abstract).
- , (1952). *Trapa* of Japan with special reference to its remains. *Jour. Inst. Polytech. Osaka City Univ.*, ser. D, **3**: 1-30.
- , (1955). Nut remains of Juglandaceae in Japan. *Ibid.*, **6**: 131-144.
- , (1956). Endocarp remains of Alangiaceae, Cornaceae and Nyssaceae in Japan. *Ibid.*, **7**: 275-295.
- , (1957). Pinaceae of Japan, with special reference to its remains. *Ibid.*, **8**: 221-272.
- , (1961). Aquatic Floral Remains in Japan. *Jour. Biol. Osaka City Univ.*, **12**: 91-121.
- , (1963). Further study of plant remains in *Pinus trifolia* beds, Central Hondo, Japan. *Chigaku Kenkyu*, Special Vol. 1963: 80-93, (in Japanese).
- , (1965). *Sequoiadendron primarium* n. sp. and *Sequoia couttisie* Heer from Tertiary beds in Japan. *Bull. Mukogawa Women's Univ.*, **13**: s. 1-7.
- , (1968). *Paleodavidia*, synonym of *Melioidendron* and fossil remains in Japan (abstract). *Ibid.* **16**: 287-291, (in Japanese with English abstract).
- , (1970). Lauraceae remains in Japan since the Pliocene, with description of 3 new species. *Ibid.*, **18**: 231-248, (in Japanese with English abstract).
- Miyawaki, A., (1984). A vegetation-ecological view of the Japanese Archipelago. *Bull. Inst. Environ. Sci. Technol. Yokohama Natn. Univ.*, **11**: 85-101.
- Mizuno, M., (1976). The Neogene Tertiary in the northern part of Higashichikuma-gun, Nagano Prefecture —A study on the Komiji syncline and Noma anticline—. *Mem. Geol. Soc. Japan*, **(13)**: 175-186, (in Japanese with English abstract).
- Mori, S., (1971). The Yadagawa formation of the Seto group in the east of Nagoya city, Aichi Prefecture. *Jour. Geol. Soc. Japan*, **77**(10): 635-644, (in Japanese with English abstract).
- Morishita, A., Oguro, J., Sawai, K., Tanaka, K., Tanaka S. and Uji, M., (1957). Geology of the southern part of Hijiriyama, Nagano Prefecture —On the stratigraphy of the so-called "Tochiku Facies" in the Ogawa Formation—. *Jour. Geol. Soc. Japan*, **63** (738): 159-166, (in Japanese with English abstract).
- Morita, H., (1936). On the *Terminalia* discovered from the Miocene of the Oguni-machi, Yamagata Prefecture. *Jour. Geol. Soc. Japan*, **40**: 355, 356, (in Japanese).
- Motojuku Collaborative Research Group, (1970). Stratigraphic study of the Motojuku Formation. *Monogr. Assoc. Geol. Collab. Japan*, **16**: 1-12, (in Japanese with English abstract).
- Motojuku Green-tuff Research Group, (1968). Double depression structure discovered in the Green-tuff (Miocene) beds of the Motojuku district. *Earth Sci.*, **22**(1): 32-36, (in Japanese with English abstract).
- Murai, S., (1957). On the fossil flora from the Shizukuishi basin, I. On some interesting fossil plants in the Goshō flora. *Rep. Tech. Iwate Univ.*, **10**: 41-45, pls. 1, 2.
- , (1962). Geology and palaeobotany of the Shizukuishi basin, Iwate Prefecture, Japan (Part II-1). *Ibid.*, **15**(2): 1-34, pls. 1-9.
- , (1963a). Geology and palaeobotany of the Shizukuishi basin, Iwate Prefecture, Japan (Part II-2). *Ibid.*, **16**(1): 77-109, pls. 10-17.
- , (1963b). Geology and palaeobotany of the Shizukuishi basin, Iwate Prefecture, Japan (Part II-3). *Ibid.*, **16**(2): 45-65, pls. 18-20.
- , (1969). On the Hishinai flora. *Tech. Rep. Iwate Univ.*, **4**: 47-67, pls. 1-5.
- Nakajima, K., Tanaka, H. and Yoshida, T., Nomura, T. and Akima Collaborative Research Group, (1976), Fossil diatoms from the Akima Formation distributed in the northern part of Annaka City, Gumma Prefecture, Central Japan. *Earth Sci.*, **30**(1): 1-8, (in Japanese with English abstract).

## References

- Nakano, H., (1942). Floristic composition of forest vegetation of deciduous broad-leaved forest zone in Honshu. *Bull. Japan. Soc. Plant Ecol.*, **2** (2) : 57-72, (in Japanese).
- Nasu, T., (1972). Floral and faunal changes during the Quaternary Period in Japan. *Biol. Sci. (Tokyo)*, **24**(1) : 1-10, (in Japanese).
- Nathorst, A. G., (1883). Contribution à la flore fossile du Japon. *Kgl. Sv. Vet.-akad. Handl.*, **20**(2) : 3-92, pls. 1-12.
- , (1886). Über die Benennung fossiler Dikotylenblätter. *Bot. Centralbl.* **25** : 52-55
- , (1888). Zur fossilen Flora Japans. *Palaeont. Abh.*, **4**(3) : 197-250, pls. 17-30.
- Newberry, J. S., (1863). Description of fossil plants collected by Mr. George Giggs (Vancouver Island and Washington Terr.). *Boston Soc. Nat. Hist.*, **7** : 506-525.
- Nomura, S., and Akima Collab. Res. Group, (1981). Geology of the northwest margin of Kanto Plain, Central Japan. *Mem. Geol. Soc. Japan*, **20** : 161-167, (in Japanese with English abstract).
- and Ebihara, M., (1988). K-Ar ages and paleomagnetism of Cenozoic volcanic rocks in the west part of Gunma Prefecture, Central Japan, *Gunma Jour. Lib. Arts Sci.*, **22** : 65-68, (in Japanese with English abstract).
- and Kosaka, T., (1987). Geologic development of Neogene System in the southwest part of Gunma Prefecture, Central Japan. *Ibid.*, **21** : 51-68, (in Japanese with English abstract).
- Ohta, S., (1950). On the Miocene flora of Mt. Tyausuyama, Nagano Prefecture, Japan. *Coll. and Breed.*, **12** : 74-81 (in Japanese).
- Ohwi, J., (1965). Flora of Japan. Revised edition. 1560 pp. Shibundo, Tokyo.
- Oishi, S., (1950). Illustrated catalogue of East Asiatic fossil plants. 235 pp., 53 pls. Chigakushuppan-shiseisha, Kyoto, (in Japanese).
- and Huzioka, (1942). On *Ailanthus* from the Miocene of Hokkaido. *Jour. Geol. Soc. Japan*, **49** : 180-182, (in Japanese).
- Okutsu, H., (1940). Fossil plants from the Nenoshiroishi plant beds. *Saito Ho-on-kai Mus. Res. Bull.*, (19) : 153-169, pls. 7-14.
- Onoe, T., (1974). A Middle Miocene flora from Oguni-Machi, Yamagata Prefecture, Japan. *Geol. Surv. Japan Rep.*, **253** : 64 pp. 14 pls.
- , Ozaki, M. and Yoshida, S., (1986). Plant fossils from the Tokai Group in the Chita Peninsula, Aichi Prefecture, Japan. *Bull. Geol. Surv. Japan*, **37**(4) : 201-206, (in Japanese with English abstract).
- Ooga, Y., (1960). [Fossil fruits and seeds from the Kobe Group (2)]. *J. Soc. Earthsci. Amatueres Japan*, **11**(4) : 228-230, (in Japanese).
- Ozaki, K., (1969). Observation of transportation of some plant leaves in the Rivers Haya and Sakawa. *Sci. Rep. Yokohama Natn. Univ. Sec. II*, (15) : 95-108, (in Japanese with English abstract).
- , (1974). Miocene floras of the Pacific side of central Japan (1). Inkyoyama flora. *Ibid.*, (21) : 1-21, pls. 1-3.
- , (1979). Late Miocene Tatsumitoge flora of Tottori Prefecture, southwest Honshu, Japan (I). *Ibid.*, (26) : 31-56, pls. 7.
- , (1980a). On Urticales Ranales and Rosales of the Late Miocene Tatsumitoge flora. *Bull. Natn. Sci. Mus.*, Ser. C. (Geol.), **6**(2) : 33-58, pls. 7.
- , (1980b). Late Miocene Tatsumitoge flora of Tottori Prefecture, southwest Honshu, Japan (III). *Sci. Rep. Yokohama Natn. Univ.*, Sec. II, (27) : 19-45, pls. 9.
- , (1981). On the paleoenvironments of the Late Miocene Tatsumitoge flora. *Ibid.*, (28) : 47-75.
- , (1984). Two new fossil species of *Fortunearia* and *Davidia* from the upper Motojuku (Kabutoiwa) Formation in Central Japan. *Mem. Inst. Field Educ. Yokohama Natn. Univ.*, (2) : 1-8.
- , (1987). *Tetracentron* leaves from the Neogene of Japan. *Trans. Proc. Palaeont. Soc. Japan*, N. S., (146) : 77-87.
- , Ishii, Y. and Moro, T., (1981). Fossil plants from the Itahana and Akima Formations around An-naka City, Gunma Prefecture in Japan. *Sci. Rep. Yokohama Natn. Univ. Sec. II*, **28** : 77-89, (in Japanese with English abstract).
- Ozima, M., Kaneoka, I., Kono, M., Kinoshita, H., Kobayashi, K., Ohnaka, Y., Nagata, T. and Aramaki, S., (1968). Paleomagnetism and K-Ar ages of successive lava flows (3)—Hanamagari and Kirizumi andesites, Gunma Prefecture, Japan—. *Jour. Geomag. Geoelectr.*, **20** : 101-105.
- Sai-kawa Research Group, (1965). Geology in the district of Naniai-mura, Shinko-mura and Shinonoi City, Nagano Prefecture—Study on geology of the “Sai-kawa” drainage area, Nagano Prefecture, Japan (Part 3)—*Jour. Geol. Soc. Japan*, **71**(835) : 173-184, (in Japanese with English abstract).
- Saito, T., (1963). Miocene planktonic Foraminifera from Honshu, Japan. *Sci. Rep., Tohoku Univ. 2nd ser. (Geol.)*, **35**(2) : 123-209.
- Saito, Y., (1961a). Geology of the northern part of the Fossa Magna (Part 1). *Jour. Fac. Educ. Shinshu Univ.*, **11** : 179-200.
- , (1961b). A preliminary note on the structure-system of the Tertiary formations in the northern part of the Fossa Magna. *Bull. Fac. Educ. Shinshu Univ.*, **12** : 99-108.

- , (1962a). Geology of the northern part of the Fossa Magna (Part 2). *Ibid.*, **13**: 23-54.
- , (1962b). Ditto, (Part 3). *Jour. Fac. Educ. Shinshu Univ.*, **12**: 134-160.
- , (1963). Ditto, (Part 4). *Bull. Fac. Educ. Shinshu Univ.*, **14**: 123-142.
- Shibata, K., Utsumi, S. and Nakagawa, T., (1979). K-Ar results-1. *Bull. Geol. Survey Japan*, **30**(12): 677-678, (in Japanese).
- Shimazaki, T., Tokunaga, S. and Onoe, T. (1972). Some stratigraphic consideration concerning the fossil pollen and spores in the oil bearing regions of Honshu, Japan. *Japan Assoc. Petrol. Technol.* **37**(7): 31-398 (in Japanese).
- , — and —, (1973). Ditto (supplement). *Ibid.*, **38**(2): 118-119 (in Japanese).
- Suzuki, Kazuhisa, (1977). Paleocurrents and sedimentary facies of the Neogene Aoki, Ogawa and Shigarami Formations in the central part of the northern Fossa Magna. *Jour. Geol. Soc. Japan*, **83**: 783-793, (in Japanese with English abstract).
- Suzuki, Keiji, (1959a). On the flora of the Upper Miocene Tennoji Formation in the Fukushima Basin, Japan, and its Palaeoecological Aspect. *Monogr. Assoc. Geol. Collab. Japan*, (9): 1-48, (in Japanese with English abstract).
- , (1959b). On the stratigraphical succession of the Miocene and Pliocene flora in the northeastern Japan. *Shinseidai-no-kenkyu (Cenozoic Res.)*, (30): 1-24, (in Japanese).
- , (1960). On the Rhamnaceae from the Late Miocene and Pliocene Yamato Group in the western border of the Aizu basin, Fukushima Prefecture, Japan. *Sci. Rep. Tohoku Univ. Ser. (Geol.), Special Vol. (Hanzawa Memorial Volume)*, **4**: 316-322.
- , (1961). The important and characteristic Pliocene and Miocene species of plants from the southern part of the Tohoku District, Japan. *Sci. Rep. Fac. Art and Sci. Fukushima Univ.*, **10**: 1-96.
- , (1967). Discovery of *Tetracentron* leaves from the Neogene in Japan. *Proc. Japan Acad.*, **43**: 526-530.
- , Ibe, H. and Ogawa, Y., (1970). Study on the flora of the Upper Motojuku Formation. *Monogr. Assoc. Geol. Collab. Japan*, **16**: 13-25, (in Japanese with English abstract).
- Suzuki, Nobuo, (1967). Late Tertiary floras of Hokkaido, Japan. Jubl. Publ. Commem. Prof. Yasuo Sasa 60th Birthday, pp. 291-302. Sapporo, (in Japanese with English summary).
- Suzuki, Tokio, (1961). Preface of forest zone of Japan, —From world-wide view at present—. *Geography*, **6**(9): 1036-1043, (in Japanese).
- Takahashi, K., (1954). Zur fossilen Flora aus der Oya-Formation von Kiushu, Japan. *Mem. Fac. Sci. Kyushu Univ.*, ser. D., **5**(1): 47-67, pls. 1-8.
- Takayanagi, Y., Takayama, T., Sakai, T., Oda, M. and Kitazato, H., (1976). Microbiostratigraphy of some Middle Miocene sequences in northern Japan. In Takayanagi, Y. and Saito, T. (eds.), *Micropaleontology Press*, New York.
- , Y., Saka, T., Oda, M., Takeyama, T., Oriyama, J. and Kaneko, M., (1978). Problems relating to the Kaburano Stage. *Cenozoic Geology of Japan* (Prof. N. Ikebe Mem. Vol.): 93-111.
- Takei, K. and Koike, M., (1981). The geologic structure of Kodama, Hiki, Yoshimi and Iwatono areas of the western margin of the Kanto Plain. *Mem. Geol. Soc. Japan*, **20**: 169-176, (in Japanese with English abstract).
- Takeuchi, A., and Sakamoto, M., (1976). Stratigraphy and geologic structure of the Neogene System in the midstream drainage of the River Sai-kawa, Nagano Prefecture, Central Japan. *Mem. Geol. Soc. Japan*, **13**: 187-201 (in Japanese with English abstract).
- Tanai, T., (1952). Des fossiles vegetaux dans le bassin houiller de Nishitagara, Prefecture de Yamagata, Japon. (1). *Jap. Jour. Geol. Geogr.*, **22**: 119-135.
- , (1955). Illustrated catalogue of Tertiary plants in Japanese coal fields. I. Early and Middle Miocene floras. *Geol. Surv. Japan Rep.*, **163**: 16pp. 22pls. (in Japanese).
- , (1961). Neogene floral change in Japan. *Jour. Fac. Sci. Hokkaido Univ. ser. 4*, **11**(2): 119-398, 32 pls.
- , (1967). Miocene floras and climate in East Asia. *Abh. Zentr. Geol. Inst. Berlin*: 195-205.
- , (1970). The Oligocene floras from the Kushiro Coal field, Hokkaido, Japan. *Jour. Fac. Sci. Hokkaido Univ.*, ser. 4, **14**(4): 383-514, 20pls.
- , (1971). The Miocene Sakipenpetsu flora from Ashibetsu Area, Central Hokkaido, Japan. *Mem. Natn. Sci. Mus. Tokyo*, **4**: 127-172.
- , (1974). Evolutionary trend of the genus *Fagus* around the northern Pacific basin. *Birbal Sahni Inst. Palaeobot. Spec. Pub.* **1**: 62-83, 5 pls.
- , (1976). The revision of the Pliocene Mogi flora, described by Nathorst (1883) and Florin (1920). *Jour. Fac. Sci. Hokkaido Univ.*, ser. 4, **17**(2): 277-346, 10 pls.
- , (1983). Revisions of Tertiary *Acer* from East Asia. *Ibid.*, **20**(4): 291-390, 20 pls.
- , (1984). Floristic changes of Japan during the Late Cretaceous and Early Tertiary. 36 pp., Hokkaido Univ., Sapporo, (in Japanese).
- and Huzioka, K., (1967). Climatic implications of Tertiary floras in Japan. In Hatai, K. ed., *Tertiary Correlations and Climatic Change in the Pacific*, 11th Pacific Sci. Congress Tokyo, 1966, Symposium No. 25. p. 89-94.

- and —, (1959). A Miocene flora from the northern part of the Joban coal field, Japan. *Bull. Geol. Surv. Japan*, **10**(4) : 261-286.
- and —, (1961). A Mio-Pliocene flora from the Ningyo-toge area on the boarder between Tottori and Okayama Prefectures, Japan. *Geol. Surv. Japan Rep.* 187 : 62pp. 181pls.
- and Ozaki, K., (1977). The Genus *Acer* from the Upper Miocene in Tottori Prefecture, western Japan. *Jour. Fac Sci. Hokkaido Univ. Ser. 4*, **17**(4) : 575-606.
- and Suzuki Nobuo, (1960). Miocene maples from south-western Hokkaido, Japan. *Jour. Fac. Sci. Hokkaido Univ.*, ser. 4, **10**(3) : 551-557.
- and —, (1963). Miocene floras of southwestern Hokkaido, Japan. *Geol. Surv. Japan 80th Ann. Mem. Publ.*, p. 9-149, 27pls.
- and —, (1965). Late Tertiary floras from northeastern Hokkaido, Japan. *Palaeont. Soc. Japan. Spec. Paper*, **10** : 117pp. 21pls.
- Tanaka, J., (1887). Survey report on Japanese plant zones. 268 pp. Tokyo. n. v.
- Tanaka, K., (1962). Studies on the molluscan fossils from Central Shinano, Nagano Prefecture, Japan (part 7)—Stratigraphical and Palaeontological Studies—. *Bull. Fac. Educ. Shinshu Univ.* **13** : 41-79.
- and Hirabayashi, T., (1964). Geology in the drainage area of the Saigawa River (II). *Ibid.*, **15** : 21-36, (in Japanese).
- , Morozumi, S. Koike, H. and Hatakoshi, T., (1962). On the Tertiary System around mt. Moriya, Nagano Prefecture. *Jour. Geol. Soc. Japan*, **68**(806) : 618-628, (in Japanese with English abstract).
- Todo Collaborative Research Group, (1985). A collapse basin in the eastern margin of the Lake Tokai—Seto Group around Nakatsugawa City, Gifu Prefecture—. *Monogr. Assoc. Geol. Collab. Japan*, **29** : 101-117 (in Japanese with English abstract).
- Tomizawa, T., (1962). The Neogene formations of the Chausuyama district, Shinonoi City, Nagano Prefecture, Japan. *Jour. Geol. Soc. Japan*, **66**(797) : 53-64 (in Japanese with English abstract).
- , (1964). Geological structure of Cenozoic System in the midstream drainage of River Sai-kawa, Nagano Prefecture. *Ibid.*, **70**(831) : 586-595, (in Japanese with English abstract).
- Tsuchi, R., (1983). Notes on chronologic and geographic distributions of the Japanese Cenozoic molluscs in the framework of microplanktonic time scale. In Kotaka & Ogasawara (ed.), *Origin and migration of Japanese Cenozoic molluscs*, pp. 101-106 (in Japanese).
- (1984), Neogene biostratigraphy and chronology of Japan. In Ikebe, N. and Tsuchi, R. (eds.), *Pacific Neogene datum planes*, pp. 223-233, Univ. Tokyo Press.
- and IGCP-114 National Working Group of Japan, (1981). Bio- and chronostratigraphic correlation of Neogene sequences in the Japanese Islands. In Tsuchi, R. (ed.), *Neogene of Japan—Its biostratigraphy and chronology—* IGCP-114, Natl. Working Group of Japan, pp. 91-104.
- Uemura, K., (1988). Late Miocene floras in Northeast Honshu, Japan. *National Sci. Mus.*, Tokyo, 198 pp.
- Ujiie, H. and Hatsukari, M., (1973). Nepionic acceleration and geologic distribution of the Japanese *Miogypsinia*. *Mem. Geol. Soc. Japan*, **8** : 95-105, (in Japanese with English abstract).
- Walther, H., (1972). Studien über tertiäre *Acer* Mitteleuropas. *Abh. Staatl. Mus. Miner. Geol.*, **19** : 1-309.
- Wang, C. W., (1961). The forests of China with a survey of grassland and desert vegetation. *Maria Moors Cabot Foundation Publ.*, no. 5. 313 pp. Harvard Univ. Cambridge, Mass.
- Watanabe K., (1952). Partial unconformity in the Tertiary strata of the northeastern marginal region of the Kwanto mountainland. *Jour. Geol. Soc. Japan*, **58** : 523-528, (in Japanese with English abstract).
- , (1954). Tertiary structure of the western Kwanto district, Japan, with special reference to the crustal movement in the Yorii Phase. *Sci. Rep. Tokyo Kyoiku Daigaku*, C, **24** : 201-280.
- , Kanno, S., Takano, S. and Maruyama, I., (1950). Tertiary geology in the northeastern marginal region of the Kwanto Mountainland. *Bull. Chichibu Mus. Nat. Hist.*, **1** : 93-146 (in Japanese with English abstract).
- Wolfe, J. A., (1978). A paleobotanical interpretation of Tertiary climates in the Northern Hemisphere. *American Scientist*, **66**(6) : 694-703.
- , (1979). Temperature parameters of humid to mesic forests of Eastern Asia and relation to forests of other regions of the Northern Hemisphere and Australasia. *U. S. Geol. Surv. Prof. Pap.* **1106** : 1-37.
- , (1985). Distribution of major vegetational types during the Tertiary. *Geophysical Monograph*, **32** : 357-375.
- and Hopkins, D. M., (1967). Climatic changes recorded by Tertiary land floras in northwestern North America, In Hatai, K. ed., *Tertiary correlation and climatic change in the Pacific* : Pacific Sci. Cong., 11th, Tokyo, Aug.-Sept. 1966, Symposium 25, pp. 67-76.
- and Poore, R. Z., (1981). Tertiary marine and nonmarine climatic trends. In Wolfgang and Cromell eds., *Climate in Earth History* : Natl. Acad. Sci., Studies in Geophysics, pp. 154-158.
- and Tanai, T., (1980). The Miocene Seldovia Point flora from the Kenai Group, Alaska. *U. S. Geol. Surv. Prof. Paper*, **1105** : 52 pp., 25 pls.
- Yagi, T., (1921). List of the Tertiary plant fossils and its localities in province of Shinano determined by Kryshtofovich. *Jour. Geol. Soc. Japan*, **28**(333) : 265-272, (in Japanese).
- , (1931). Relation of the geology of Arafuno volcano with the flora found at Kabutoiwa. *Jour. Geogr.*,

- 43(507) : 268-273. (in Japanese).
- Yamagishi, I., Koshimizu, T. and Yokoyama, H., (1984). Some fission-track ages of the Neogene in northern Fossa-Magna. Abstract of the 91th meeting of Geol. Soc. Japan, pp. 148, (in Japanese).
- Yamanaka, T., (1979). Forest vegetation of Japan. 219 pp., Tsukiji Shokan, Tokyo. (in Japanese).
- Yamanoi, T., (1986). Neogene climatic events in the coastal region of Japan, based on pollen assemblages. *Marine Sci. Monthly*, 18(3) : 140-145 (in Japanese).
- Yokoyama, T., (1969). Tephrochronology and paleogeography of the Plio-Pleistocene in the eastern Setouchi geologic province, Southwest Japan. *Mem. Fac. Sci., Kyoto Univ. Ser. Geol. & Mineral.*, 36(2) : 19-85.
- Yoshida, S. and Ozaki, M., (1986). Geology of the Handa district. Quadrangle Series, scale 1 : 50,000, Geol. Surv. Japan, 98 pp. (in Japanese with English summary).
- Yoshino, Michihiko, (1971). Palynological study of the Yadagawa Formation in the environs of Nagoya, Japan. The Pliocene and Pleistocene in Central District of Japan, pp. 129-136 (in Japanese with English abstract).
- Yoshioka, K., (1954). Sociological studies of the forests in the Tohoku district, 4. Forest communities in the northern limits of *Shiia sieboldii*. *Bull. Soc. Plant Ecol.*, 3(4) : 219-230, (in Japanese with English summary).
- , (1956). Ditto, 4. Forest communities in the northern limits of the forests of evergreen oaks. *Sci. Rep. Fukushima Univ. Fac. Sci. Art*, (7) : 13-23, (in Japanese with English summary).
- , (1973). Plant geography (in Japanese). Seitaigakukouza, no. 12, 84 pp. Kyoritsu Pub. Co., Tokyo.