

60) *Thuidium Toyamae* Noguchi, sp. nov. (Fig.38).

Musci Japonici, ser. 2, no. 91.

Planta sat robusta, laete-viridis haud nitida. Caulis elongatus, laxe foliosus, paraphyllis densissime vestitus, paraphyllis ramosis, filiformibus vel foliosis, cellulis 1~3 papillois, regulariter tripinnatim ramosus, ramis siccitate flexuosis, inferioribus ca 1 cm longis, superioribus sensim brevioribus, dense foliosis, ramulis 2~3 mm longis, paraphyllis parce vestitis. Folia caulina sicca recurva, e basi late cordata raptim in acumen subulatum apice piliferum flexuosum attenuata, biplicata, 1~1.7 X 0.7~0.89 mm, marginibus recurvis, serratis, costa valida basi ad 8 μ lata, sensim angusta in acumine dissoluta, dorso papillosa, e medio ad basin dense paraphyllis, cellulis opacis, medianis rectangularibus vel irregularibus, parietibus tenuibus dorso plerumque 2~3-raro uni papillatis, papillis altis acutis, saepe divisis, basilaribus longioribus laevibus, insertionibus lutescenti-fuscis, superioribus plerumque uni-pa-

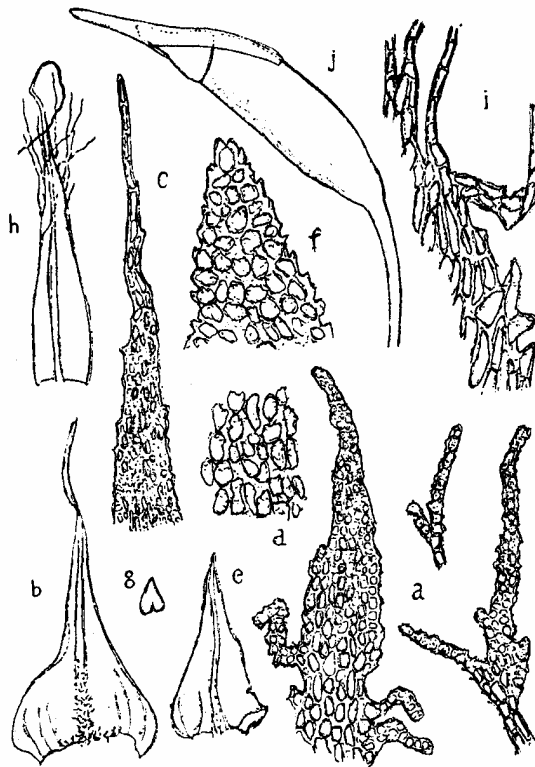


Fig. 38. *Thuidium Toyamae* Nog. a. paraphyllia. X156. b. stem-leaf. X28. c. leaf-apex. X156. d. Cells from middle of stem-leaf. X294. e. Leaf of 1st pinnate branch. f. apex of ditto. X294. g. leaf of 2nd pinnate branch. X28. h. inner perichaetial bract. X13. i. upper part of ditto. X156. j. sporophyte. X9.

pillatis. Folia ramea multo minora, laxe imbricata, 0.4 X 0.25~0.6 X 0.4~0.8 X 0.55 mm, concava eplicata, late ovato-triangularata, apice anguste acuta, marginibus erectis, spinoso-serratis, costa valida basi ca 30 μ lata, flexuosa, longe infra apicem folii evanida, dorso laxe papillosa, cellulis opacis, medianis rotundatis, parietibus crassioribus, 2~3-papillosis, papillis altis. Folia ramulina foliis rameis minoribus, costa brevissima.

Perichaetia in caulibus oriunda. Bractee perichaetii internae oblongo-lanceolatae, plicatae, ad 4.5 mm longae, marginibus late recurvis, 3~5-laciniatis vage irregulariter serratis, laciniis elongatis flexuosis, costa valida longissime piliferum recurvum flexuosum producta. Seta erecta, 4~5 cm longa, ca 0.3 mm crassa, sicca $\pm$ flexuosa, laevis, inferne rufescens superne lutescenti-fusca. Theca inclinata, fere oblongo-cylindrica, collo potius indistincto, asymmetrica, sicca $\pm$ curvata, 3 X 1.2~4 X 1 mm, laevis. Peristomium normale. Sporae globosae vel subglobosae, sublaeves, 10~18 μ in diam. Operculum conicum vel conico-rostratum, 1~1.3 mm altum. Calyptra cucullata, lutescens, laevis, ca 4 mm longa.

On moist shaded rocks and humus.

(Specim. exam.) Honsyu : prov. Musasi, Mt. Takao (H. Sasaoka, Oct. 1926), prov. Mikawa, Mt. Isimaki (K. Murata, Sept. 1932). prov. Kii (N. Ui, Mar. 1918). Kyusyu : prov. Bungo-Hukayabakei (A. Noguchi, nos. 16114b type, 16118b cotype, Sept. 1943), Mori-mati (A. Noguchi, Oct. 1946), Mt. Kudyu (A. Noguchi, Nov. 1931), prov. Higo Itibu (K. Maebara, Jan. 1931). Mt. Siraga (A. Noguchi, July. 1981), prov. Hyuga Kitago-mura (S. Hattori et A. Noguchi, Apr. 1946), Sakatani-mura (S. Hattori et A. Noguchi, Apr. 1946 et Aug. 1946), Obi-mati (S. Hattori et T. Kurata, Jan. 1947), prov. Osumi, Mt. Karakuni (A. Noguchi, Mar. 1933).

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