

**SCAGELIA Wollaston** (1972, p. 88; type: *S. occidentalis*)

*Heterotypic synonym*: *Antithamnion* sect. *Cruciatae* J. Agardh (1892, p. 21; type: *A. pylaisaei*)

**Scagelia americana (Harvey) Athanasiadis** (1996, p. 76)

*Basionym*: *Callithamnion americanum* Harvey (1853, p. 238, pl. XXXVI A)

*Type locality*: New Bedford, Massachusetts, U.S.A

*Lectotype*: TCD (Harvey 'Call. americanum H. New Bedford, Dr Roche')

*Homotypic synonyms*: *Pterothamnion americanum* (Harvey) Naegeli (1862, p. 376)

*Antithamnion americanum* (Harvey) Kjellman [1883, p. 231, as '*A. americanum* (Harvey) Farlow']

*Heterotypic synonyms*: ? *Callithamnion subnudum* Ruprecht [1850, p. 148, pl. 18, figs k-m; type locality: Gulf Nichta, South Okhotsk Sea (close to Schantar I); lectotype: LE, Ruprecht 'Guba Nichta 24/vii, Callithamnion ?...cum..Lessonia...']  
*Pterothamnion subnudum* (Ruprecht) Naegeli (1862, p. 376)  
*Scagelia subnuda* (Ruprecht) Perestenko (1984, p. 47)

? *Antithamnion occidentale* Kylin (1925, p. 47, fig. 30 a-d; type locality: Friday Harbor, Wash.; lectotype: LD, Kylin 'Antithamnion occidentale Kylin, Wash. Friday Harbor juli 1922, H. Kylin')  
*Scagelia occidentalis* (Kylin) Wollaston (1972, p. 89, 'occidentale')  
*Scagelia corallina* var. *occidentalis* (Kylin) Hansen et Scagel (1981: 211, 'occidentale')

? *Antithamnion simulans* Gardner [1927, p. 376-377, pl. 78, fig. 3; type locality: 'sheltered locality in the lower littoral belt. Sitka, Alaska'; holotype: UC 276134 (Gardner No 3938)]  
*Scagelia simulans* (Gardner) Cormaci et Furnari (1989, p. 27)

*Distribution*: NW Atlantic-Arctic: New Jersey to the Canadian Arctic (Lee 1980); western Greenland; NE Atlantic: only known with certainty from Fauskanger (western Norway); (?) NE Pacific: southern California to the Aleutian Islands (Lindstrom & Gabrielson 1989); (?) NW Pacific: Hokkaido (Yoshida 1981) and the Okhotsk Sea

*Notes*: (i) isolates from San Juan Island (Washington State) and plants from Fauskanger (western Norway) were intersterile in culture, suggesting that the two strains might be genetically isolated. Chromosome counts in the Pacific gametophytes showed a haploid number of c. 32 chromosomes (Athanasiadis 1996, table VI), corresponding to the approximate number reported in the Norwegian plants (Athanasiadis & Rueness 1992)  
(ii) in the collections from San Juan I., a second morphotype has been identified (viz. plants with up to 0.5 mm long branches in whorls of 2 or 3, usually acropetally and unilaterally ramified; see also Wollaston 1972, p. 90)  
(iii) Kjellman (1883, p. 231) attributed the combination *A. americanum* to Farlow (1881, 123) who however treated *Antithamnion* as a subgenus of *Callithamnion* and did not introduce the combination

**Scagelia pylaisaei (Montagne) Wynne** (1985, p. 85)

*Basionym*: *Callithamnion pylaisaei* Montagne (1837, p. 351)

*Type locality*: 'Ad oras Americae borealis praesertim in Insula Terra-Nova...'

*Lectotype*: PC (Montagne 'Ceramium moniliforme Dlp.,..., Callithamnion Pylaisaeum Montagne, Terre Neuve Com. Cl. de la Pylaie')

*Homotypic synonyms*: *Wrangelia pylaisaei* (Montagne) J. Agardh (1852, p. 705)  
*Pterothamnion pylaisaei* (Montagne) Naegeli (1862, p. 376)  
*Antithamnion pylaisaei* (Montagne) Kjellman (1883, p. 225)  
*Antithamnion plumula* (Ellis) Thuret var. *pylaisaei* (Montagne) Rosenvinge (1893, p. 788)

*Heterotypic synonyms*: ? *Callithamnion corallina* Ruprecht (1850, p. 148-9, pl. 18, figs n-q; type locality: Dshukdshandran coast, Okhotsk Sea; type: LE ?) - not a homonym of *Callithamnion corallinum* Lyngbye 1819, the epithets being grammatically different (noun vs adjective)  
*Antithamnion corallina* (Ruprecht) Naegeli [1862, p. 412]  
*Antithamnion boreale* f. *corallina* (Ruprecht) Kjellman [1883, p. 226]  
*Antithamnion boreale* var. *corallina* (Ruprecht) Sundene [1962, p. 15]  
*Scagelia corallina* (Ruprecht) Hansen et Scagel [1981, p. 211]

? *Scagelia pylaisaei* var. *corallina* Athanasiadis [1996, p. 79, as '*S. pylaisaei* var. *corallina* (Sundene) Athanasiadis'], invalid

? *Antithamnion pylaisaei* f. *norvegicum* Kjellman (1883, p. 225, pl. 16, fig. 1, 'norvegica', type locality: Gjesvaer, Finnmark, North Norway; type: not designated)

? *Scagelia breviariculata* Perestenko [1984, p. 48, fig. 3; type locality: 'Insulae Kurilenses, ins. Simuschir, sinus Kitobojnyj dictus, ad solum saxosum, in horizonte zonae litoralis, 18.vii.1967'; holotype: LE]

*Distribution:* Newfoundland to Canadian Arctic (Lee 1980) and North Norway to Spitsbergen: (?) Okhotsk Sea

*Notes:* (i) plants from Spitsbergen and North Norway, differing in reproductive characters and previously identified as *S. pylaisaei* var. *corallina* (Athanasiadis 1996, pp. 79-80), are provisionally subsumed in the typical variety of the species that exhibits a similar morphology (i.e., distinctively unequal whorl-branches)

(ii) plants with subequal whorl-branches (see Harvey 1853, pl. 34 B; Athanasiadis 1996, fig. 30 B) may belong to a separate entity (see also Maggs & Hommersand 1993, fig. 10)

#### KEY TO THE SPECIES

1. Thallus with loose (lax) branch ramification; whorl-branch and branchlet cells composed of elongate cells, 5 or more times longer than broad.....2
1. Thallus with compact branch ramification; whorl-branch and branchlet cells composed of barrel-shaped cells, usually only 2 or 3 times longer than broad.....*S. pylaisaei*
2. Thallus with 2 to 4 whorl-branches per axial cell; whorl-branches deccusately arranged turning their flat side towards the bearing axis; plants with a regular *Polysiphonia*-type of life history..... *S. americana*
2. Thallus with 1 or 2 (3) whorl-branches per axial cell; whorl-branches usually distichously arranged along the bearing axis; plants sterile or with tetrasporangia and rarely gametangial structures on the same thallus (mixed-phases); tetrasporangia abortive or recycling the parental phase.....*S. pusilla* (*Scagelothamnion pusillum*)

REFERENCES see SCAGELOTHAMNION

NOTE: This is a periodically updated electronic file, to be regarded as a preliminary version not effectively published (Art. 30.2).