

ANTHONY JOHN EDWIN SMITH (1935-2012)

Mark Hill

Tony Smith, who has died in north Wales at the age of 77 was one the leading British bryologists in the second half of the 20th century. He is best known for his comprehensive and well-loved *Moss Flora of Britain and Ireland* (1978, 2nd edition 2004). This was the first full moss flora since the *Student's Handbook* of Dixon and Jameson (3rd edition 1924). His mentor, E.F. ("Heff") Warburg, had planned a British flora with Alan Crundwell, but Crundwell generally preferred detail to the wide synoptic sweep, so that when Warburg died in 1966, the project was rapidly abandoned. Smith joined the botany department at Bangor in 1963 and was encouraged by Paul Richards, then head of department, to take on this major project. Tony did this with aplomb, benefiting from his marriage to the artist Ruth Williams, who did most of the illustrations. On the way, he solved many taxonomic problems, for example that of the bulbiferous *Pohlia*s. His student Keith Lucas demonstrated that elongate bulbils were produced not only by *Pohlia prolifera* and *P. andalusica*, but confusingly also under some environmental conditions by *P. annotina* and *P. flexuosa*.

His sorties with Mark Hill into numerical taxonomy were perhaps less successful. There was no clear biometric distinction between *Ulota crispa* and *U. bruchii*, and in spite of the many differences between these taxa, he came to the conclusion that they should be treated as subspecies. Further work, this time with Michael Proctor, using a scanning electron microscope, demonstrated subtle peristome differences that are qualitative and not quantitative. In a more conventional area, he encouraged Mark Hill with his studies of *Sphagnum*, inviting him to write an account of the genus for his flora.

Tony Smith was born in Somerset in 1935, educated at St Andrew's School in Singapore, and went up to Lincoln College Oxford in 1955. There he studied botany and soon acquired his enthusiasm for bryophytes from Warburg. He went on to complete a doctorate under Warburg on infraspecific variation in *Melampyrum pratense*. In 1960 he moved to the University College of Swansea, where he stayed for three years. He subsequently published a bryophyte flora of Glamorgan (1964). By the standards of modern bryophyte floras this was a relatively slight publication, but it was typical of its time and a useful product of his brief period at Swansea.

In the late 1960s Tony largely gave up field work after falling into a diabetic coma on a student excursion. This was a great loss, and it meant that his species accounts lack the easy familiarity with mosses in the field that is such a feature of the *Student's Handbook*. Time not spent on fieldwork was devoted to many other projects. The largest of these was the bryophyte mapping scheme, which began in 1960 and culminated in the BBS's bryophyte atlas

(1991-4). For the atlas's 30-years gestation, Tony was BBS Mapping Secretary, a task to which his temperament was not ideally suited. He worked best on a one-to-one basis with other researchers, and was less good at networked research. At times, he got bogged down in detailed extraction of data, a task that he should have delegated to lesser mortals. The eventual outcome was a happy one, but he was sometimes glum about the project in its middle years.

While the moss flora and the mapping scheme were the central pillars of his work, he had many other bryological interests. He made cytological studies. He edited the *Journal of Bryology* (1978-1992). He edited an excellent compendium on bryophyte ecology (1982). He wrote a liverwort flora (1990), which served as a useful gap-filler until Jean Paton's (1999) magnum opus came along. He was for many years referee for *Grimmia*, a genus that continues to baffle experts as well as beginners. He richly deserved the warm applause that greeted his election to BBS Honorary Membership in September 1994.

His diabetes was severe and unstable. He lost one eye to it. The other eye was saved by laser treatment at the 11th hour but was far from perfect. As a result he was rarely seen at BBS meetings and was hardly known to younger members of the society. He was, however, a good correspondent, maintaining his bryological output until 2008 when he had heart surgery. British bryology owes a great deal to his enthusiasm and doggedness. The moss flora and bryophyte atlas are his lasting monuments, and we celebrate his life, which has contributed so much to bryology not only in Britain but widely on the European continent.

Bibliography

Abderrahman S, Smith AJE. 1982. Studies on the cytotypes of *Atrichum undulatum* (Hedw.) P. Beauv. 1. Morphology and distribution. *Journal of Bryology* **12**: 265-271.

Abderrahman S, Smith AJE. 1983. Studies on the cytotypes of *Atrichum undulatum* (Hedw.) P. Beauv. 2. Chromosome length and relative DNA content. *Journal of Bryology* **12**: 479-.

Arts T, Nordhorn-Richter G, Smith AJE. 1987. *Pohlia muyldermansii* Wilcz. & Dem. var. *pseudomuyldermansii* var. nov., a new name for *P. muyldermansii* Wilcz. & Dem. sensu Lewis & Smith. *Journal of Bryology* **14**: 635-647.

Blockeel TL, Smith AJE. 1998. *Pottiopsis* gen. nov. and notes on other taxa of British and Irish Pottiaceae. *Journal of Bryology* **20**: 65-68.

Corley MFV, Crundwell AC, Düll R, Hill MO, Smith AJE. 1981. Mosses of Europe and the Azores; an annotated list of species, with synonyms from the recent literature. *Journal of Bryology* **11**: 609-689.

Crundwell AC, Smith AJE. 1989. *Lophozia herzogiana* Hodgson & Grolle in southern England, a liverwort new to Europe. *Journal of Bryology* **15**: 653-657.

Crundwell AC, Smith AJE. 2000. *Heterocladium wulfsbergii* I. Hagen in the British Isles.

Journal of Bryology **22**: 43-47.

Hill MO, Smith AJE. 1976. Principal component analysis of taxonomic data with multi-state discrete characters. *Taxon* **25**: 249-255.

Hill MO, Preston CD, Smith AJE, editors. 1991-1994. *Atlas of the bryophytes of Britain and Ireland, Vol. 1 (1991), Vol. 2 (1992), Vol. 3 (1994)*. Colchester: Harley Books.

Lewis K, Smith AJE. 1977. Studies on some bulbiferous species of *Pohlia* section *Pohliella*. 1. Experimental investigations. *Journal of Bryology* **9**: 439-556.

Lewis K, Smith AJE. 1978. Studies on some bulbiferous species of *Pohlia* section *Pohliella*. 2. Taxonomy. *Journal of Bryology* **10**: 9-27.

McAdam SV, Smith AJE. 1981. *Brachythecium appleyardiae* sp. nov. in southwest England. *Journal of Bryology* **11**: 591-

Richards PW, Smith AJE. 1975. Progress report on *Campylopus introflexus* (Hedw) Brid and *Campylopus polytrichoides* De Not in Britain and Ireland. *Journal of Bryology* **8**: 293-298.

Smith, AJE. 1961. A note on the differences between *Melampyrum pratense* L. and *M. sylvaticum* L. *Proceedings of the Botanical Society of the British Isles* **4**: 151-152.

Smith, AJE. 1963. Variation in *Melampyrum pratense* L. *Watsonia* **5**: 336-367

Smith AJE. 1964. A bryophyte flora of Glamorgan. *Transactions of the British Bryological Society* **4**: 539-596.

Smith, A.J.E. 1964. The annual meeting, 1963. *Transactions of the British Bryological Society* **4**: 748-750.

Smith AJE. 1970. *Fissidens-viridulus* Wahlenb. and *F. minutulus* Sull. *Transactions of the British Bryological Society* **6**: 56-.

Smith AJE. 1972. Some observations on *Orthotrichum-shawii* Wils ex Schimp. *Journal of Bryology* **7**: 21-&.

Smith AJE. 1972. Chromosome number of *Orthotrichum striatum* Hedw. *Journal of Bryology* **7**: 88-&.

Smith AJE. 1972. New combination in *Fissidens*. *Journal of Bryology* **7**: 87-&.

Smith AJE. 1992. The taxonomic status of the British varieties of *Grimmia trichophylla* Grev. *Journal of Bryology* **17**: 269-273.

Smith AJE. 1973. Differences between *Bryum creberrimum* Tayl. and *B. pallescens* Schleich. ex Schwaegr. *Journal of Bryology* **7**: 333-337.

Smith AJE. 1974. *Philonotis marchica* (Hedw.) Brid. in Britain. *Journal of Bryology* **8**: 5-8.

Smith AJE. 1976. New combinations in British and Irish mosses. *Journal of Bryology* **9**: 279-280.

Smith AJE. 1977. Status of *Orthotrichum stramineum* var. *patens* (Brid.) Vent. and *Fontinalis hypnoides* Hartm. in Britain. *Journal of Bryology* **9**: 395-396.

Smith AJE. 1977. Further new combinations in British and Irish mosses. *Journal of Bryology* **9**: 393-394.

Smith AJE. 1978. *The moss flora of Britain and Ireland*. Cambridge: Cambridge University

Press.

Smith AJE. 1978. *Provisional atlas of the bryophytes of the British Isles*. Abbots Ripton: Biological Records Centre.

Smith AJE. 1981. New combinations in European mosses. 3. Pleurocarpous species. *Journal of Bryology* **11**: 605-607.

Smith AJE, editor. 1982. *Bryophyte ecology*. London: Chapman & Hall.

Smith AJE. 1986. Bryophyte phylogeny - fact or fiction. *Journal of Bryology* **14**: 83-89.

Smith AJE. 1986. Third international congress of systematic and evolutionary biology symposium on bryophyte phylogeny Brighton England UK July 10 1985. *Journal of Bryology* **14**: 1-184.

Smith AJE. 1990. *The liverworts of Britain and Ireland*. Cambridge: Cambridge University Press.

Smith AJE. 1993. *Ditrichum flexicaule* and *D. crispatissimum* in Great Britain and Ireland. *Bulletin of the British Bryological Society* **61**: 45-54.

Smith AJE. 2001. Mosses, liverworts and hornworts. In: Hawksworth DL, editor. *The changing wildlife of Great Britain and Ireland*. London: Taylor and Francis, pp. 78-102.

Smith AJE. 2004. *The moss flora of Britain and Ireland*. 2 ed. Cambridge: Cambridge University Press.

Smith AJE. 2008. *Tortula schimperi* in England. *Field Bryology* **94**: 21-22.

Smith AJE, Duckett JG, Seaward MRD. 1973. Distribution maps of bryophytes in Britain. *Journal of Bryology* **7**: 447-459.

Smith AJE, Hill MO. 1975. A taxonomic investigation of *Ulota bruchii* Hornsch. ex Brid., *U. crispa* (Hedw.) Brid. and *U. crispula* Brid. 1. European material. *Journal of Bryology* **8**: 423-433.

Smith AJE, Proctor MCF. 1993. Further observations on the *Ulota crispa* complex. *Journal of the Hattori Botanical Laboratory*: 171-182.

Smith AJE, Rose F, Stirling AM, O'Shea BJ. 1971. Distribution maps of bryophytes in Britain. *Transactions of the British Bryological Society* **6**: 331-349.

Smith AJE, Whitehouse HLK. 1974. Sporophyte and male plants of *Tortula stanfordensis* Steere and taxonomic position of this and *Tortula khartoumensis* Pettet and *Tortula rhizophylla* (Sak.) Iwats. and Saito. *Journal of Bryology* **8**: 9-14.

Smith AJE, Whitehouse HLK. 1978. Account of British species of *Bryum bicolor* complex including *Bryum dunense* sp. nov. *Journal of Bryology* **10**: 29-47.

Smith AJE, Whitehouse HLK, Sowter FA. 1972. Distribution maps of bryophytes in Britain. *Journal of Bryology* **7**: 89-95.

Werner J, Smith AJE. 2004. *Grimmia alpestris* in Wales. *Field Bryology* **84**: 8.