

***Coniochaeta hansenii* (Oudem.) Cain & *Coniochaeta philocoproides* (Griffiths) Cain – PDD 76476 (= AEB 769)**

**Substrate:** rabbit (*Oryctolagus cuniculus*) dung

**Collected:** 6 May 2002; **Incubated in a moist chamber:** 17 June 2002; **first observed:** 28 June 2002

**Collection site:** Westland, Haast, Ship Creek; Latitude and Longitude (WGS84): -43.7593 169.149

**Collector:** Ann Bell, during the 16th Fungal Foray of New Zealand

**Identifiers:** Ann Bell & Dan Mahoney

**Voucher materials:** One dried rabbit dung pellet accompanied by 3 lactophenol slide mounts (2 *C. philocoproides* & 1 *C. hansenii*; microscopic detail photos by Dan Mahoney of both species from various lactophenol mounts using an Olympus BX51 compound scope with a DP28 camera; pertinent reference, comment and earlier collection.

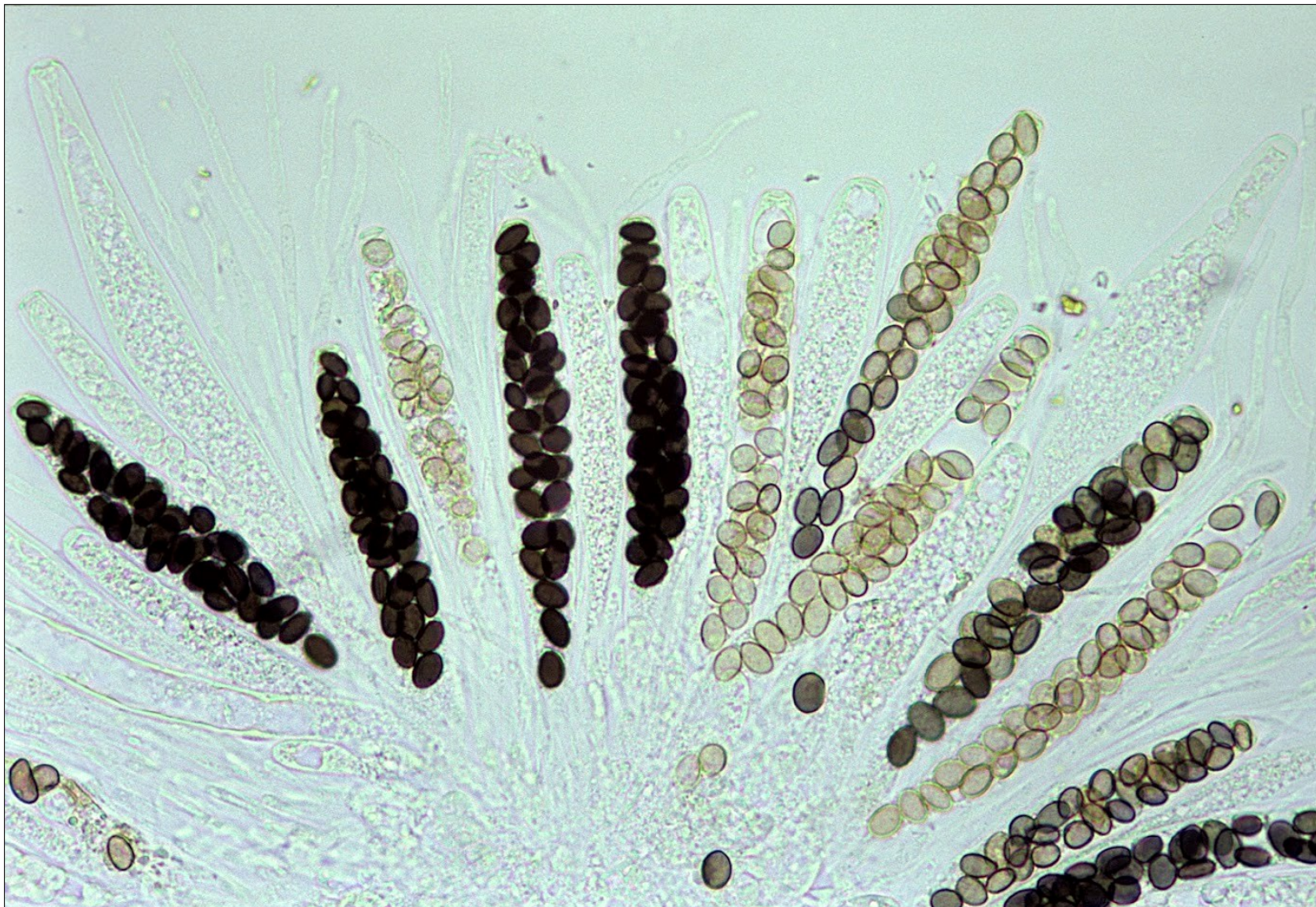
**Pertinent reference, comment and earlier collection:**

1. Asgari B., Zare R. & Gams W. 2007. *Coniochaeta ershadii*, a new species from Iran, and a key to well-documented *Coniochaeta* species. Nova Hedwigia 84: 175–187. **A relevant portion of that key is reproduced here:**

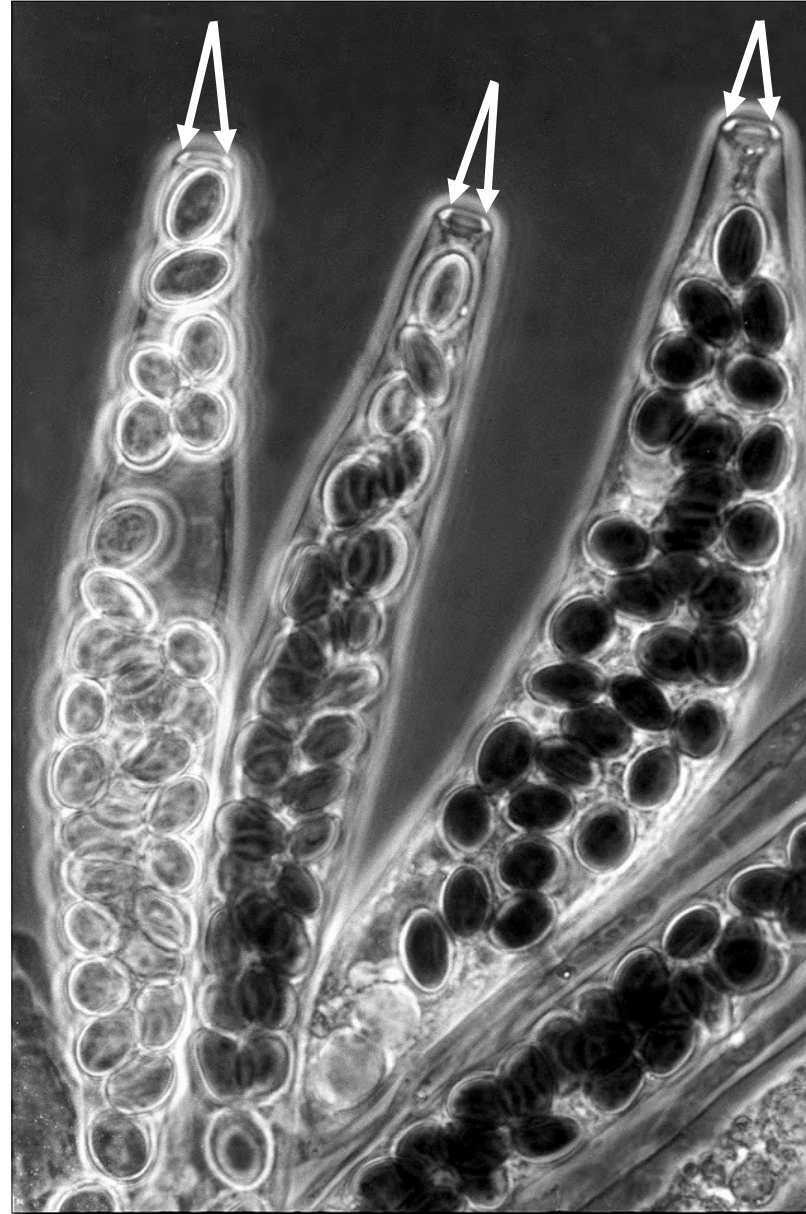
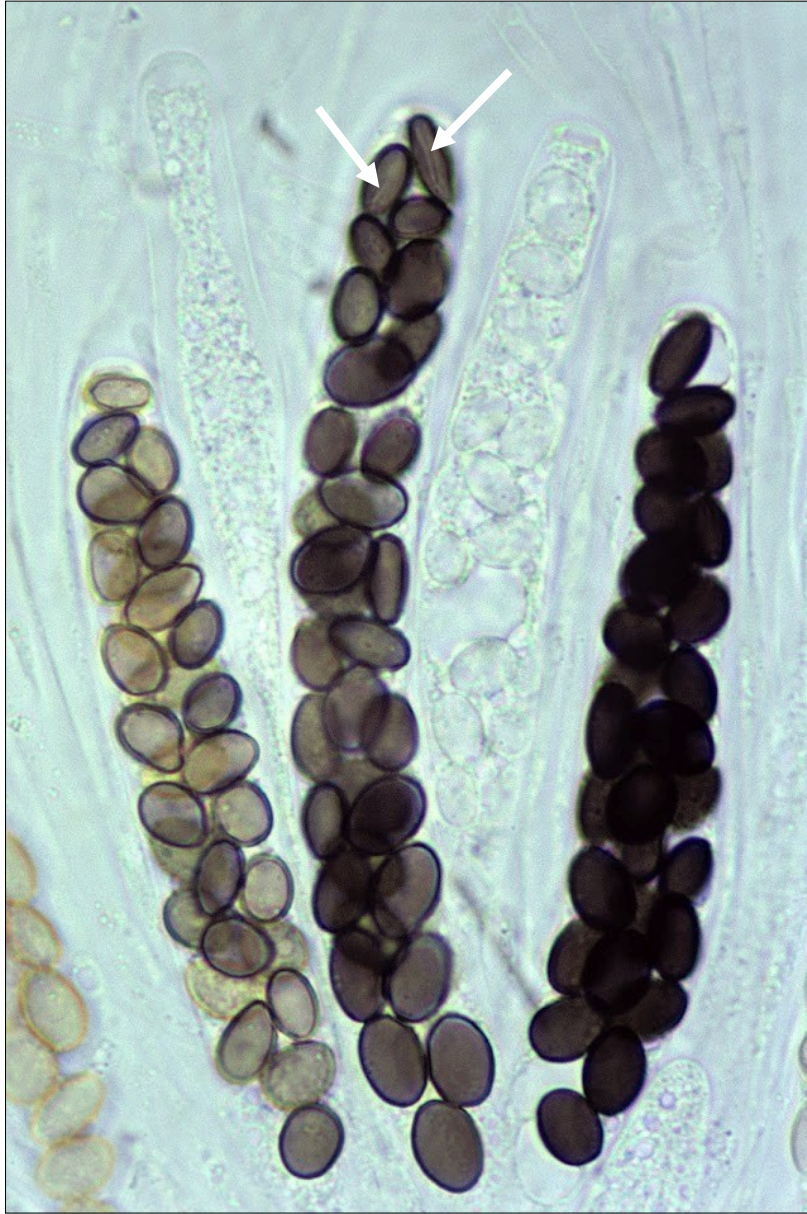
Key to well-documented <i>Coniochaeta</i> species	
1. Asci multispored.....	2
1. Asci 4-8-spored.....	6
2. Asci with 128 or fewer spores.....	3
2. Asci with more than 128 spores.....	5
3. Ascospores discoid with germ slit around the circumference, 13-16.5 × 9.5-13.5 × 5.5-9 µm; asci with 64 spores.....	<i>C. polymegasperma</i>
3. Ascospores narrowly elliptical in side view.....	4
4. Ascospores broadly elliptical to subcircular in face view, 8 × 6-8 µm; asci with 32 spores.....	<i>C. philocoproides</i>
4. Ascospores broadly elliptical to circular or ovate in face view, 6-9 × 5-9 × 4-7 µm; asci with 64-128 spores.....	<i>C. hansenii</i>
5. Asci with 512 spores; ascospores circular to broadly ovate in face view, elliptical in side view, 7-8 × 6-8 × 4-4.5 µm.....	<i>C. polysperma</i>
5. Asci with 1000 or more spores; ascospores circular in face view, elliptical in side view, 5-7 × 3-6 µm.....	<i>C. multispora</i>

2. PDD 76476 (= AEB 769) was originally reported as only *C. philocoproides*. However, when Dan examined the original 2002 lactophenol slides, one of them turned out to be *C. hansenii*. Therefore, the edited PDD is now named *Coniochaeta hansenii* & *Coniochaeta philocoproides* PDD 76476 (= AEB 769)

3. Worth including are three photos of *Coniochaeta philocoproides* from an earlier unreported collection of hare dung near Ketetahi hot springs (Mt Tongariro) in 1987. **See the next 2 pages.**



***Coniochaeta philocoproides***: An earlier hare dung collection not represented by an herbarium specimen (no AEB or PDD numbers). **Substrate**: hare dung. **Collectors/Identifiers**: Ann Bell and Dan Mahoney. **Location**: Ketetahi Track (Mt. Tongariro) near the hot springs, tussock vegetation. **Date collected**: 25-10-87. **Date incubated**: 27-10-87. **Date observed**: 12-11-87. **Photos**: 3 – lower magnification on this page & higher on the next. All from slides in water mounts.



***Coniochaeta philocoproides*. Photos from the hare dung collection at Ketetahi seen on the previous page. Both photos of 32-spored asci shown at the same magnification in water slide mts. Left photo: brightfield, note the arrowed longitudinal germ slits. Right photo: phase, note the arrowed apical ring on the asci.**



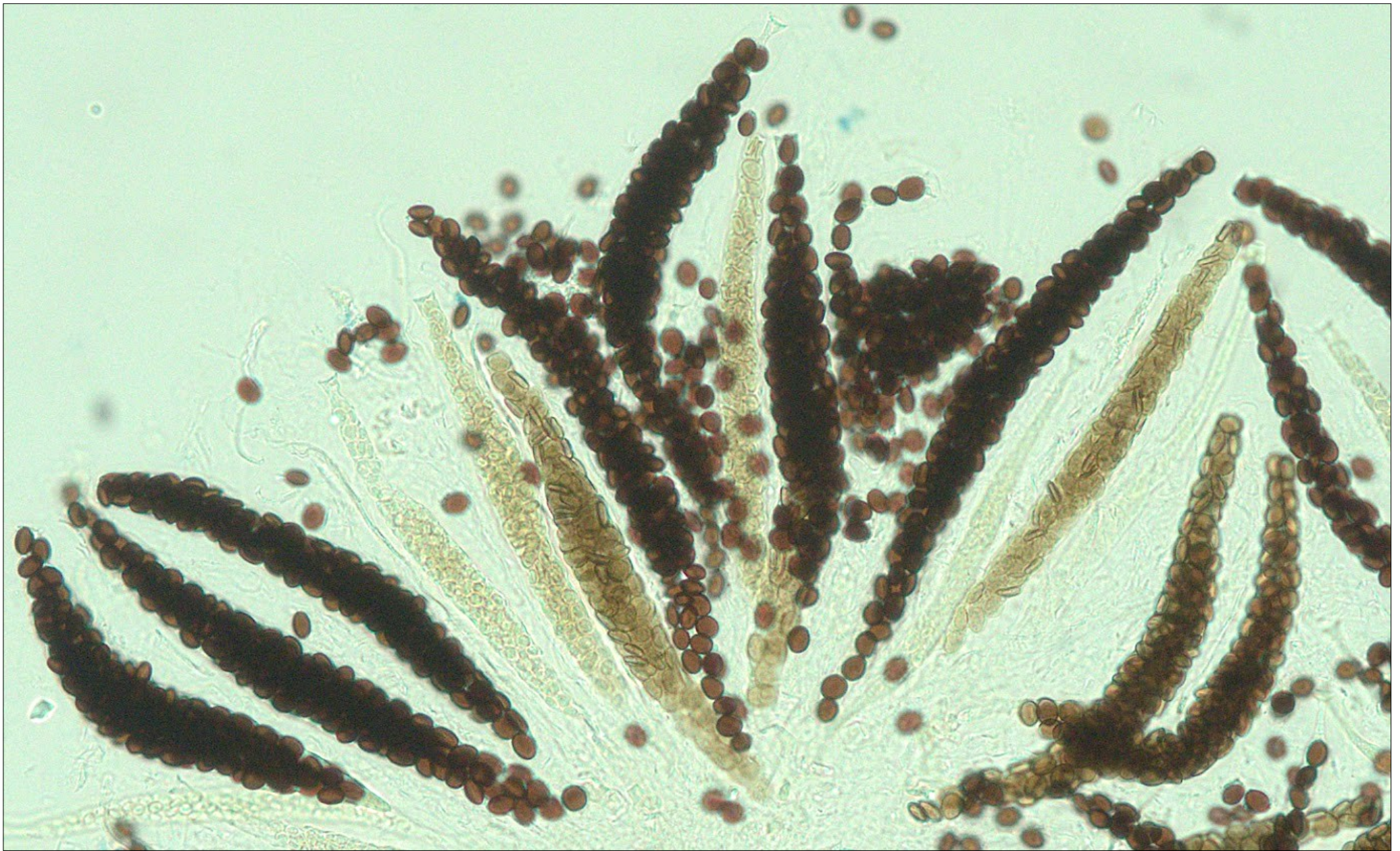
**AEB 769 *Coniochaeta hansenii*. Perithecium whose contents have been forced out leaving a clear view of the venter peridium and neck chaetae. Seen in a lactophenol slide mount using the X20 objective.**



**AEB 769 *Coniochaeta hansenii*.** Centrum contents forced from the perithecium on the previous page. The asci seen contain  $\approx 64$  ascospores. Seen here using the X20 objective. Asci better seen at X40 obj. on the next 2 pages.



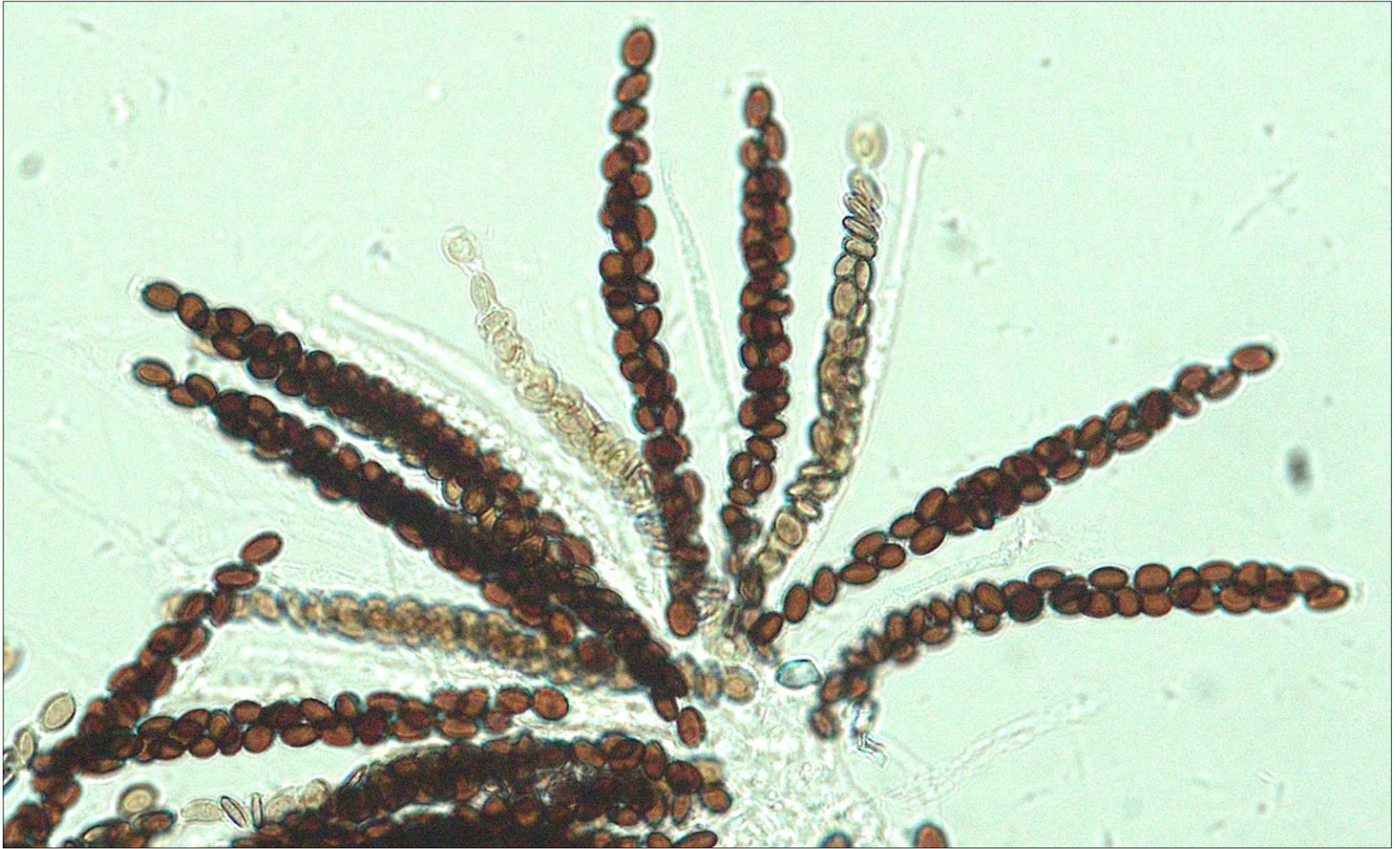
**AEB 769 *Coniochaeta hansenii*. Lower half of the centrum asci seen on the previous page. Even at twice the magnification, accurate counts of the closely packed ascospores aren't possible; my attempts yielded more than 64.**



**AEB 769 *Coniochaeta hansenii*.** Upper half of the centrum asci seen on the previous page. Even at twice the magnification, accurate counts of the closely packed ascospores aren't possible; my attempts yielded more than 64.



**AEB 769 *Coniochaeta philocoproides*. Clusters of mostly mature asci with  $\approx 32$  ascospores each. Seen here in a lactophenol slide mount using the X20 objective.**



**AEB 769 *Coniochaeta philocoproides*. Clusters of mostly mature asci with  $\approx 32$  ascospores each. Seen here in a lactophenol slide mount using the X40 objective.**