

***Podospora curvicolla* (G. Winter) Niessl – AEB 796 (= PDD 77955)**

Species Fungorum current name: *Pseudoechria curvicolla* (G. Winter) Y. Marín, A.N. Mill. & Stchigel

Collection site: William Smith Drive, Kuranda, Queensland, Australia; **Collection date:** 20 June 2001

Substrate: guinea pig (*Cavia porcellus*) dung – dung collection # A502

Collector: Kyle Pearce

Identifier: Ann Bell

Voucher material: dried herbarium specimen (one dung pellet with numerous perithecia) accompanied by 2 microscope slide mounts prepared from fresh material at the time of dung incubation. These slides in Shear's mounting fluid (SMF) and aniline blue lactic acid (ABLA) resp. were rejuvenated with SMF in May 2022 and Dan Mahoney's compound microscope photos taken from them; Dan's brief comments.

Dan's brief comments:

In addition to the *P. curvicolla* collection dealt with here (PDD 77955), there is another from Australia that Ann identified (PDD 73532 from New South Wales). Her book "BELL, A. 2005. An illustrated guide to the coprophilous Ascomycetes of Australia. CBS Biodiversity Series No. 3, Centraalbureau voor Schimmelcultures, Utrecht, the Netherlands, 172 pages" includes drawings of *P. curvicolla* as well as her observations in 1982 of Harry Dade's Australian dung collection notes and slides at the Rydalmere herbarium in New South Wales. These notes and slides are now in the herbarium (DAR) at Orange. Ann's drawings and the records of her observations of Dade's slides and notes in her 2005 book are presented on the next page.

Measurements and descriptive details of AEB 796 accompany the photographs in this pdf. Dan's other pdf's on *P. curvicolla* in the PDD datastore provide further information on the degree of variation that Ann and I have observed in this species.

Dade recognized some 19 species of *Podospora* (from dung in Australia during the 1960's & 70's). There are three boxes of his slides of this genus at the herbarium (DAR) at Orange. In one box he left a note "Several are wrongly identified & some dubious – serious revision necessary". In addition to the slides, he left thorough notes and illustrations of his observations and corresponded with Cain and others who were working on the genus at that time. He sent duplicates of his slides to Gunnell at Kew. She in turn incorporated some of his slides into the IMI collections. Dade drew up two charts listing the species of Cain 1934 and 1962 (Chart 1) and the additional species listed in Mirza & Cain 1969 (Chart 2). In 1982 I studied a number of his *Podospora* slides and Table 3 represents my observations on Dade's collections:

Table 3. Reidentification of *Podospora* slides from Dade's collections.

Dade's identification	Collection numbers studied in 1982	Current identification
<i>Podospora anserina</i>	V119g(1), V182e, V590d, V594b	<i>Podospora anserina</i>
<i>Podospora australis</i>	V192h, V257f, V268a, V970d	<i>Podospora australis</i>
<i>Podospora coronifera</i>	V182j	<i>Podospora decipiens</i>
<i>Podospora curvula</i>	V399e, V397g, V543a, V586e, V799c	<i>Podospora conica</i>
<i>Podospora decipiens</i>	V103e, V127b, V182j, V192j, V485b, V513g, V548c, V770f	<i>Podospora decipiens</i>
<i>Podospora fimicola</i>	V257j, V301j, V609d, V636d	<i>Podospora fimiseda</i>
<i>Podospora perplexans</i>	V127j, V130e, V 187d, V573c	<i>Podospora perplexans</i>
<i>Podospora prethopodalis</i>	V205j	<i>Podospora excentrica</i>
<i>Podospora pyriformis</i>	V441f	<i>Podospora pyriformis</i>
<i>Podospora tetraspora</i>	V244a, V528a, V718d	<i>Podospora tetraspora</i>
<i>Podospora</i> tax. sp. I	None seen	? <i>Podospora vesticola</i>
<i>Podospora</i> tax.sp. II	V713f	<i>Podospora excentrica</i>
<i>Podospora</i> tax. sp. III	V229c, V525c, V605f, V953f, V954h, V968c	<i>Podospora curvicolla</i>

Emphasis: Table 3. Reidentification of *Podospora* slides from Dade's collections.

Dade's identification	Collection numbers studied in 1982	Current identification
<i>Podospora</i> tax. sp. III	V229c, V525c, V605f, V953f, V954h, V968c	<i>Podospora curvicolla</i>

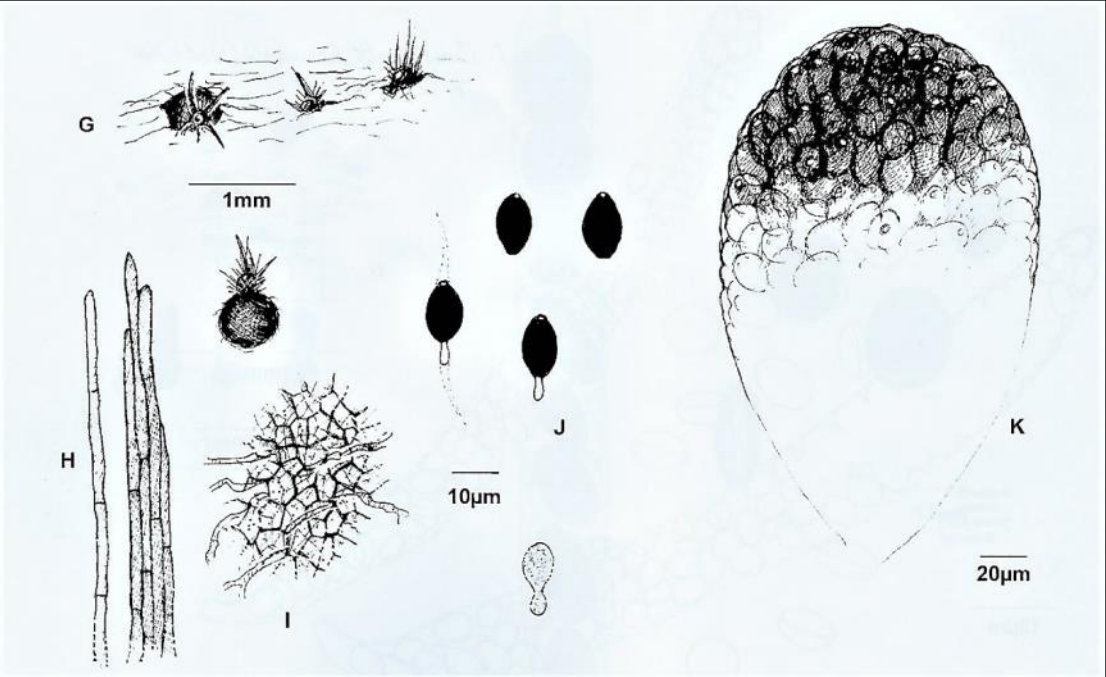
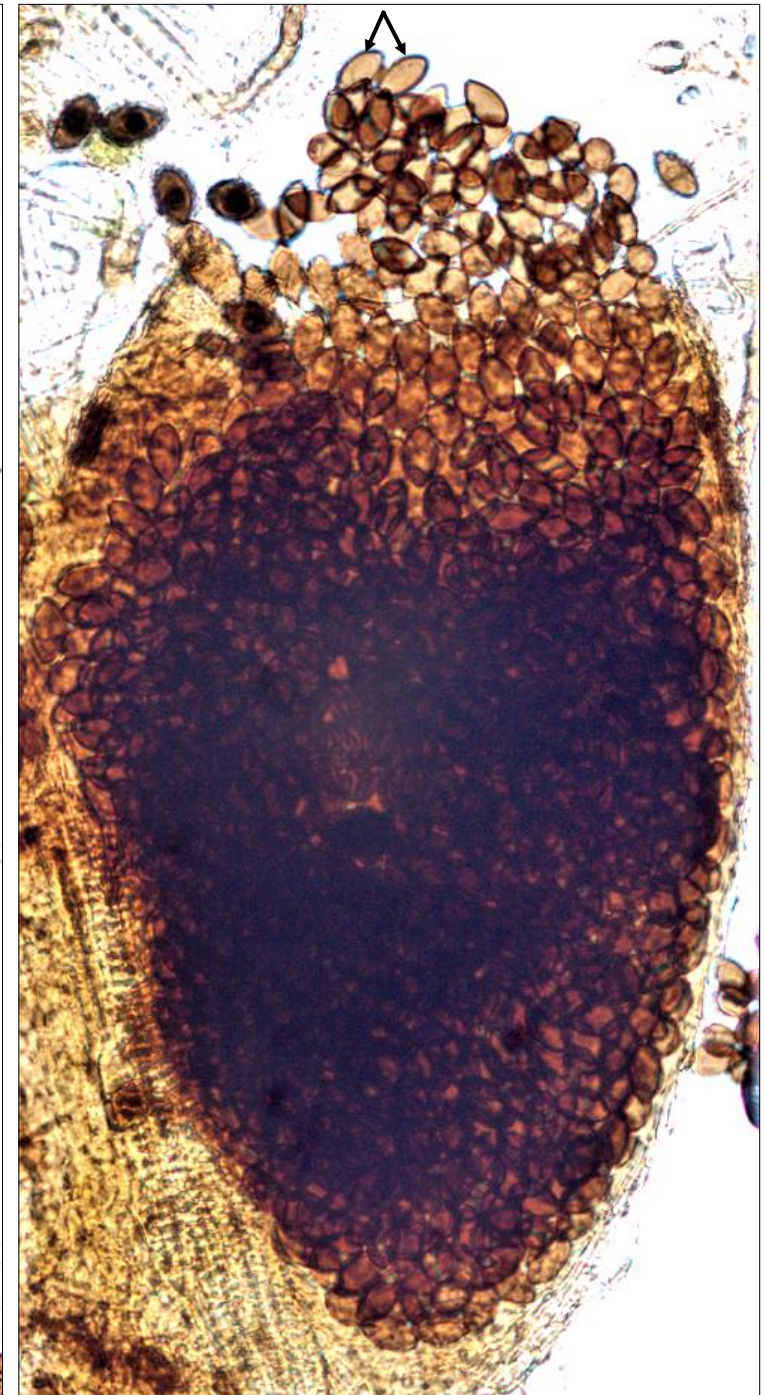
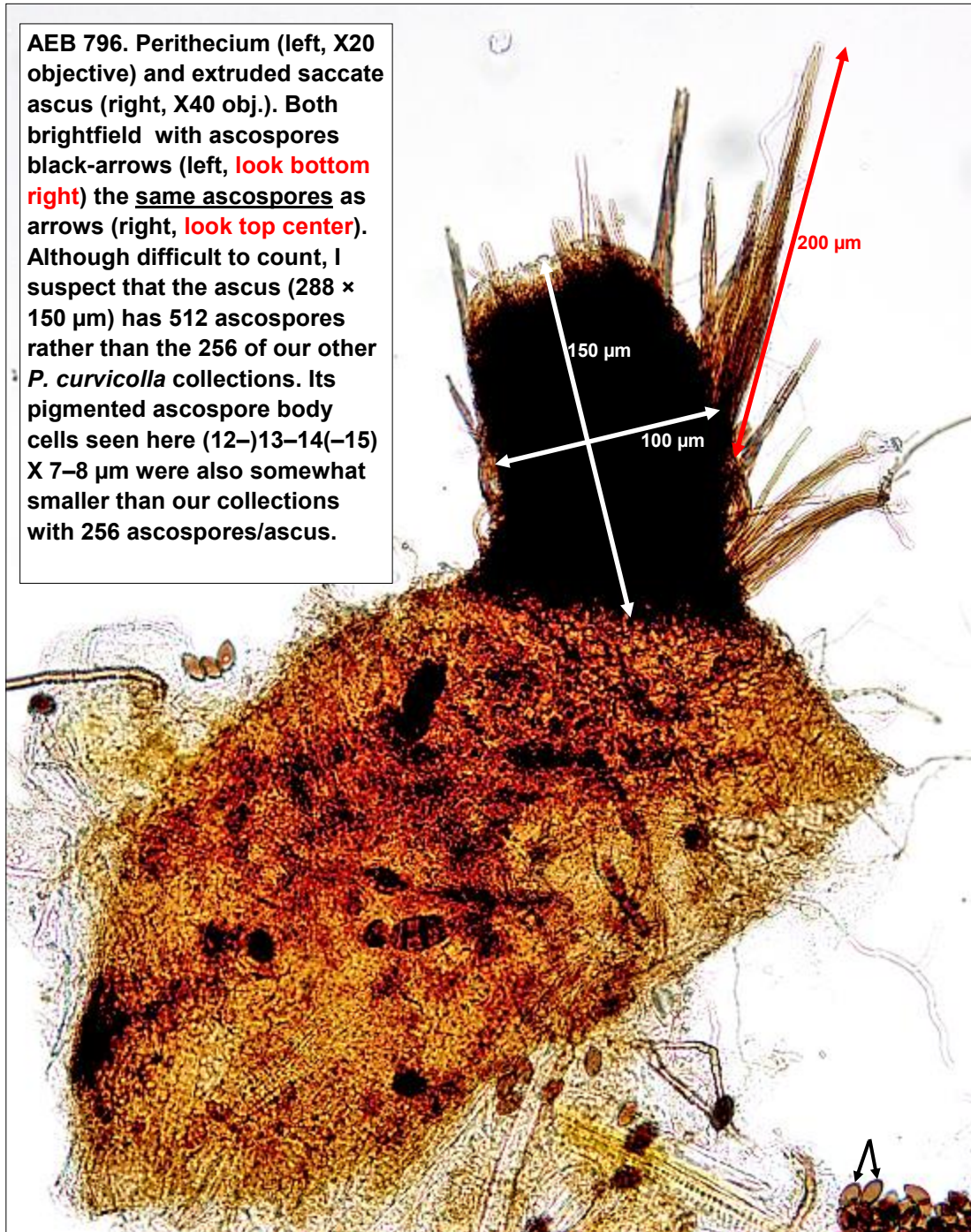


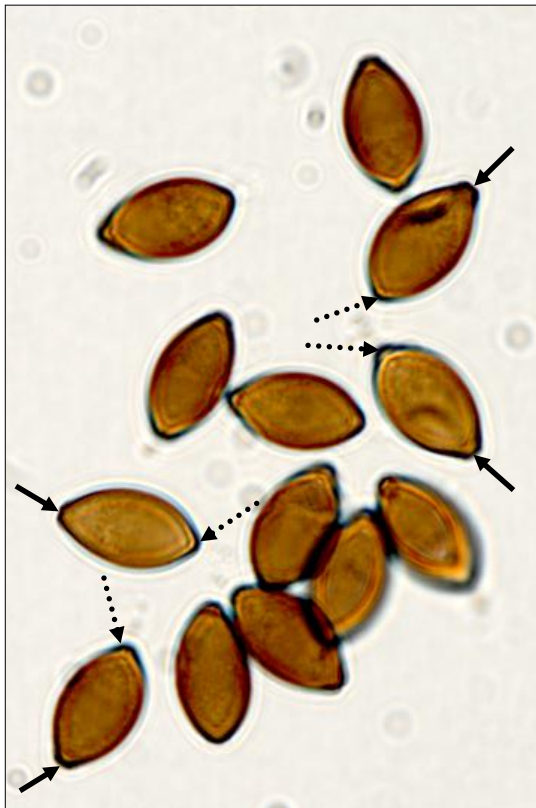
Fig. 66. *Podospora curvicolla*. G-K. G. Perithecia. H. Perithecial bristles. I. Peridium. J. Mature & immature ascospores. K. Mature ascus.

AEB 796. Perithecium (left, X20 objective) and extruded saccate ascus (right, X40 obj.). Both brightfield with ascospores black-arrows (left, **look bottom right**) the same ascospores as arrows (right, **look top center**). Although difficult to count, I suspect that the ascus ($288 \times 150 \mu\text{m}$) has 512 ascospores rather than the 256 of our other *P. curvicolla* collections. Its pigmented ascospore body cells seen here (12–)13–14(–15) \times 7–8 μm were also somewhat smaller than our collections with 256 ascospores/ascus.





AEB 796. Perithecium (left photo, X20 objective) and close-up (right photo, X40 obj.). Both brightfield. Note the textura angularis venter peridium (left) and the close-up ascospores (right). Other ascospores (left) represent different fungi.



AEB 796. Ascospore pigmented body cells in SMF heated. Viewed under the X100 objective using brightfield microscopy. These measured (12–)13–14(–15) X 7–8 μ m. Their basal truncate ends (solid arrows) are where the single hyaline pedicels once were. Apical, slightly more tapered ends (dotted arrows), are the germ pore locations.





AEB 796. Perithecium in an original aniline blue lactic acid dung-incubation mount, rejuvenated in 2022 with SMF heated. Photo under the X20 objective using brightfield microscopy. Note the number of agglutinated setae on the neck.