

***Podospora curvicolla* (G. Winter) Niessl – AEB 457 (= PDD 73626); Species Fungorum current name: *Pseudoechria curvicolla* (G. Winter) Y. Marín, A.N. Mill. & Stchigel**

Collection site: Te Kauri Lodge, Kawhia Road, N. Island, New Zealand; **Collection date:** 20 May 1988

Substrate: goat/sheep (?) dung – dung collection # NZ152

Collector: Dan Mahoney

Identifiers: Dan Mahoney & Ann Bell

Voucher material: dried dung herbarium specimen accompanied by 4 microscope slide mounts prepared from fresh material at the time of dung incubation in 1995. These slides in lactophenol were rejuvenated with Shear's mounting fluid (SMF) in May 2022 and compound microscope photos taken from them; other B&W photos were taken in 1995 from water mounts of ascospores mounted directly from fresh perithecia on the incubating dung or from corn meal (CMA) germination and potato dextrose (PDA) axenically grown perithecia; Dan's brief comments.

Dan's brief comments: Aside from size differences, sterile tissue among the asci and young ascospore development not always observed in other collections of this common *Podospora*, it is clearly *P. curvicolla*. Among our many collections of this species, only one from possum dung on the S. Island, Pororari River Track [AEB 1353 (= PDD 120020)] has ascospore body cells $\geq 20\ \mu\text{m}$ (in that case, $20\text{--}23 \times 13\text{--}15\ \mu\text{m}$). However, those in AEB 457 are the largest $(19\text{--})20\text{--}24(\text{--}25) \times 13\text{--}15(\text{--}17)$. Likewise, the pedicels in these 2 collections are the largest seen: $10\text{--}12.5 \times 3\ \mu\text{m}$ in AEB 1353 and $11\text{--}13(\text{--}15) \times 3\text{--}4\ \mu\text{m}$ in AEB 457. Perithecium neck bristles (spinose agglutinated setae) are often also longer but these vary widely in number, size and neck position among the collections. Worth noting in AEB 457 are the large, swollen (globose to subglobose) packing cells among the asci in some mountings. These aren't typical 'paraphyses' and are not mentioned in other descriptions. Notable also are the developmental views of young ascospores shown in a photo plate of this pdf – the pedicels (to be) are disproportionately larger than their ellipsoidal body cells.

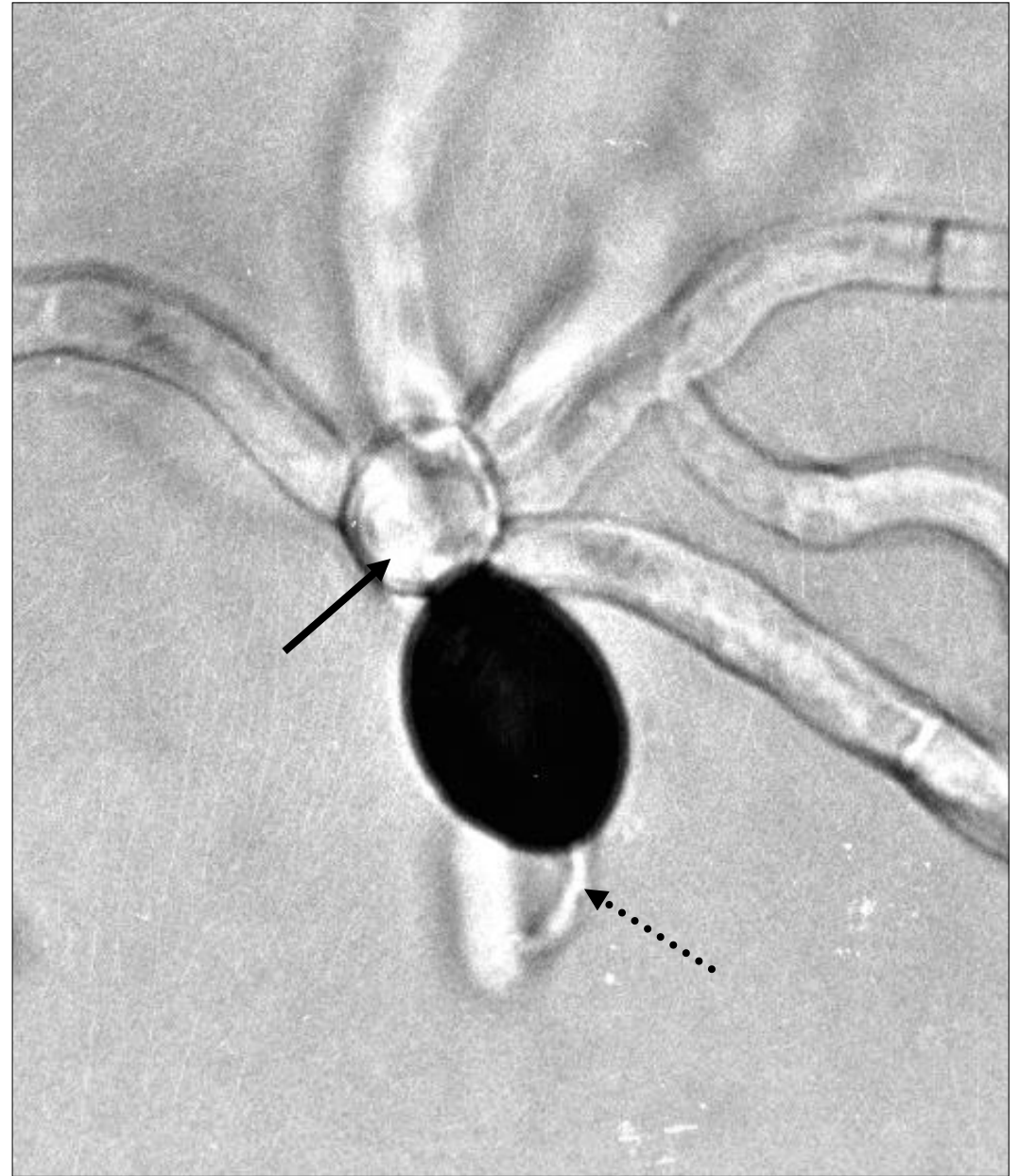
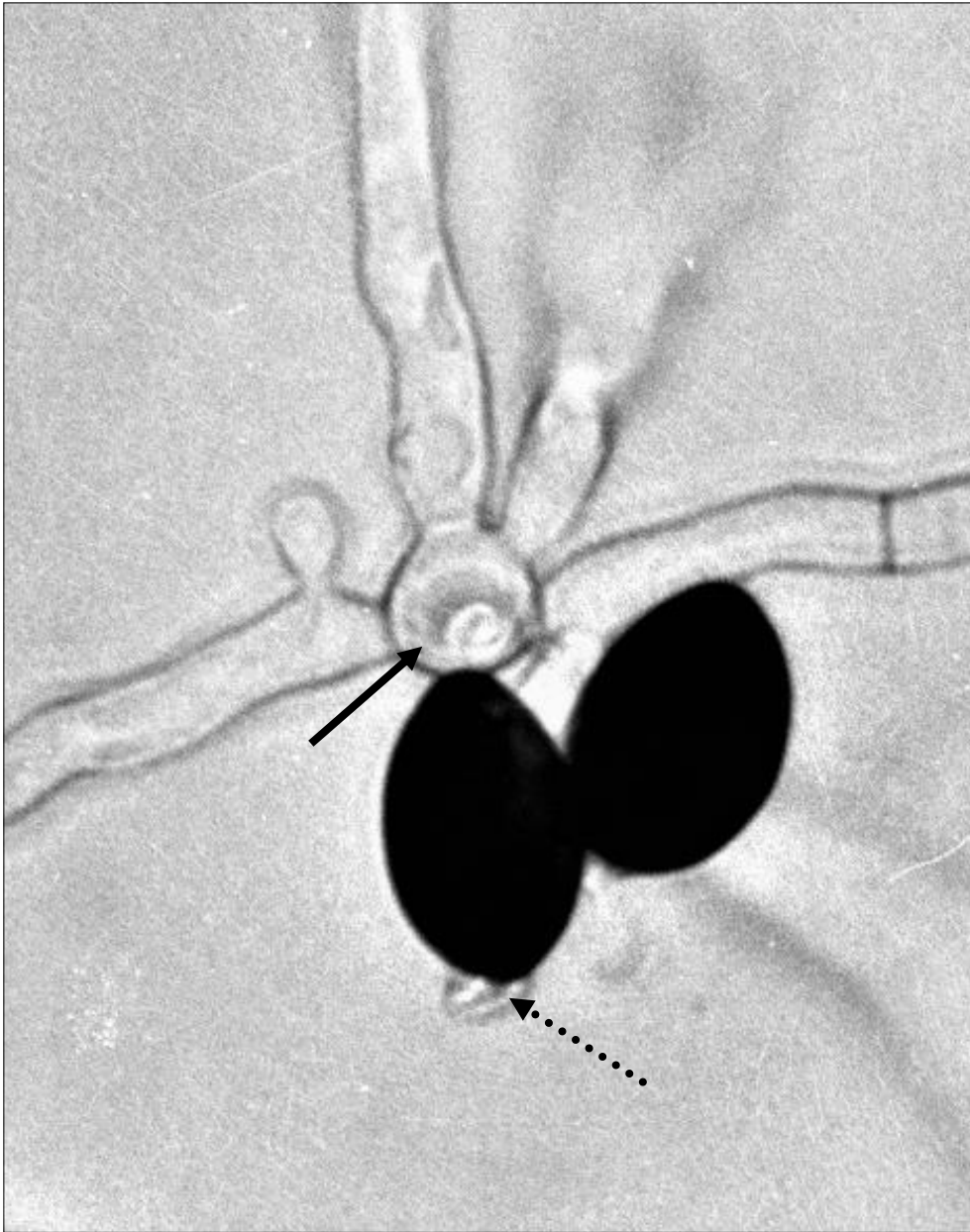


***Podospora curvicolla* NZ152.** Photos of the same perithecium: Left X10 objective, others X20 obj. From a lactophenol mount prepared in 1995 from fresh perithecia on the dung (that slide rejuvenated in 2022 with SMF). Perithecium venter ($520 \times 500 \mu\text{m}$), neck ($170 \times 130 \mu\text{m}$) & longest agglutinated setose spine ($350 \mu\text{m}$).

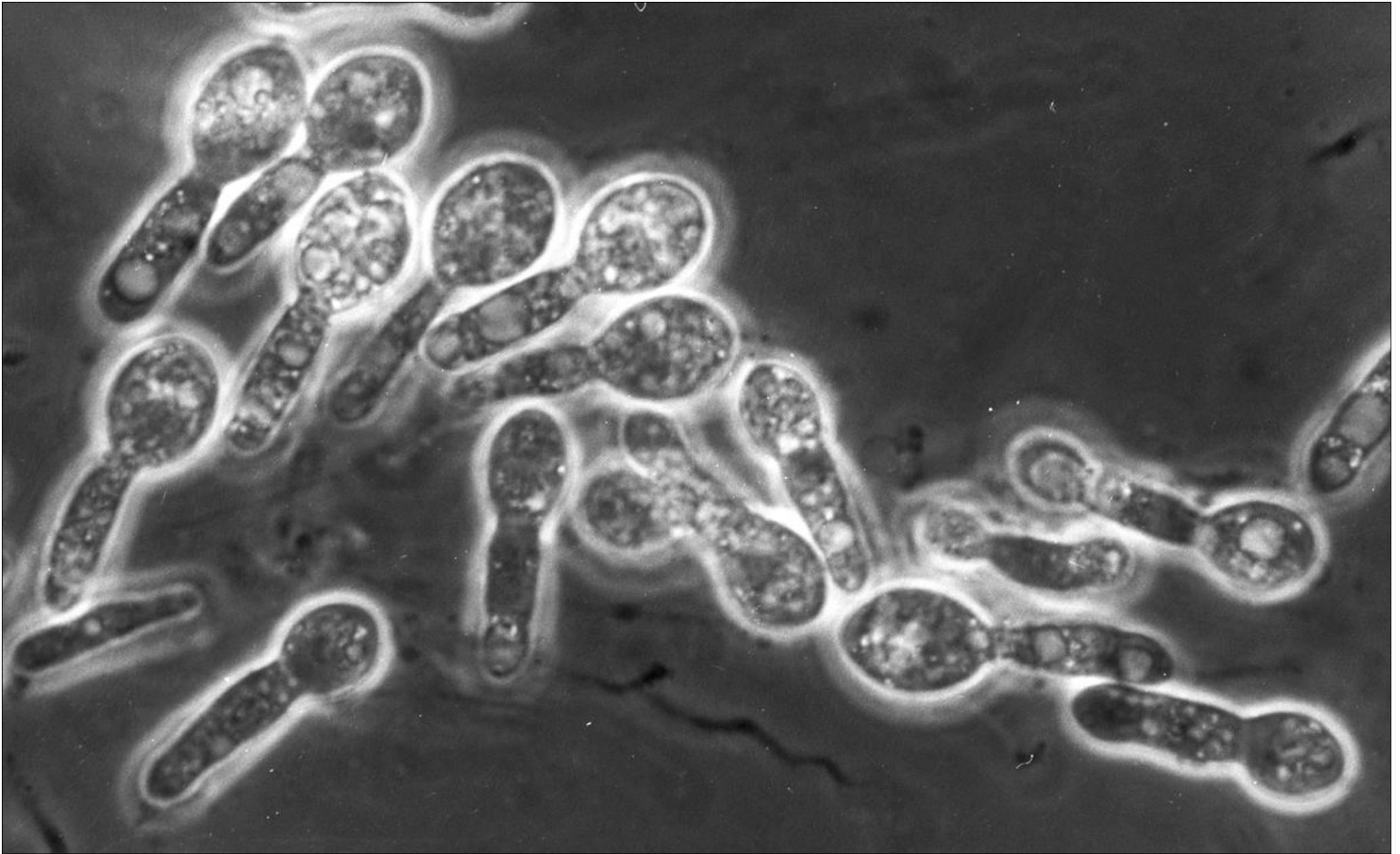


Podospora curvicolla NZ152. A cluster of asci in various stages of development. From a lactophenol mount prepared in 1995 from a fresh perithecium on an axenic PDA culture (that slide rejuvenated in 2022 with SMF). In these photos taken at different magnifications, the arrows point to the same roughly 256-spored ascus ($320 \times 150 \mu\text{m}$) .

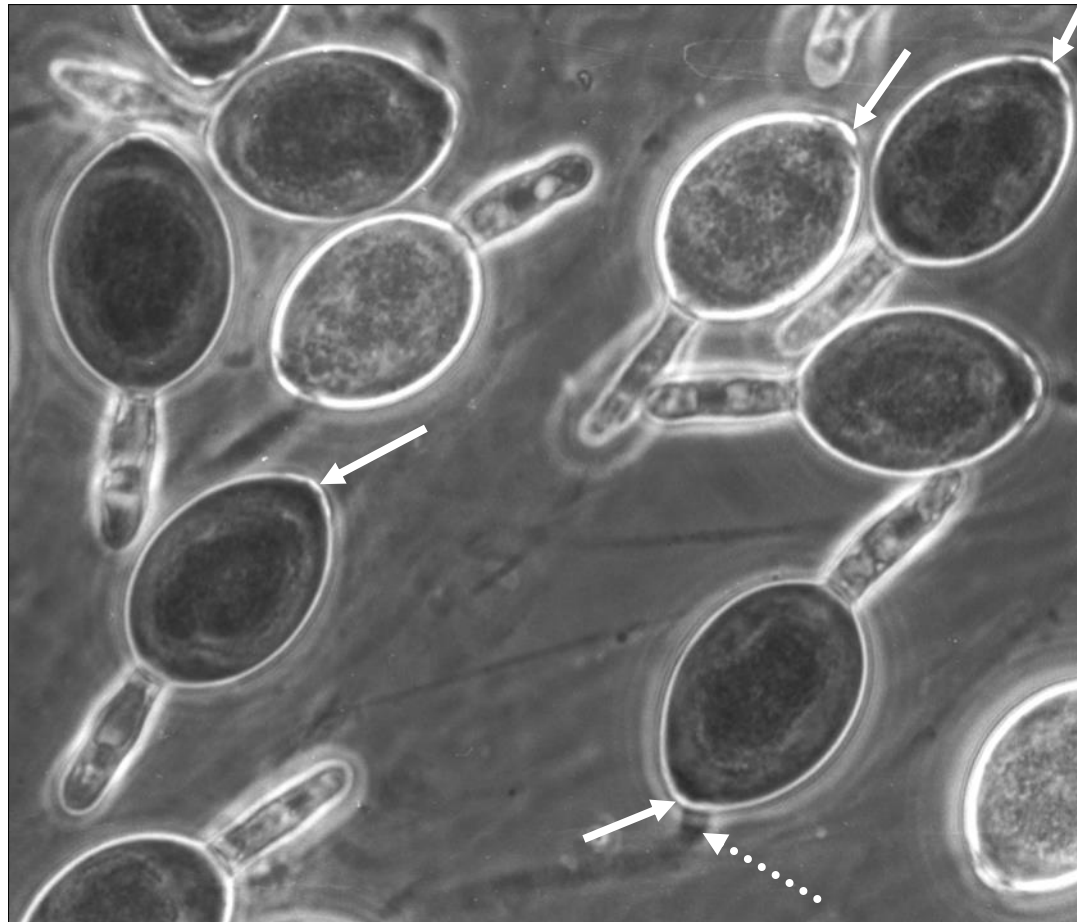
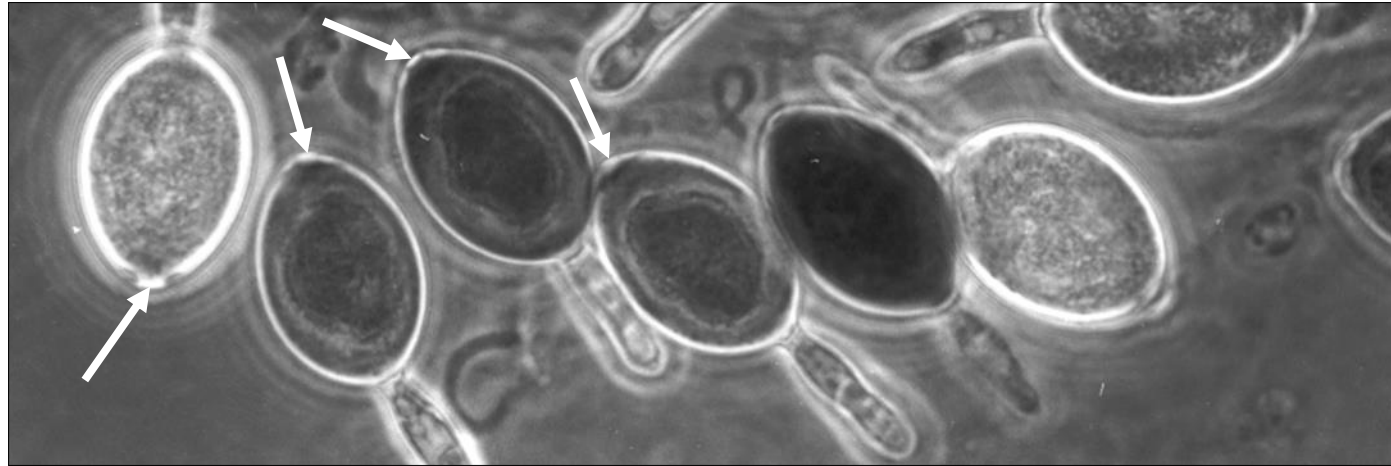




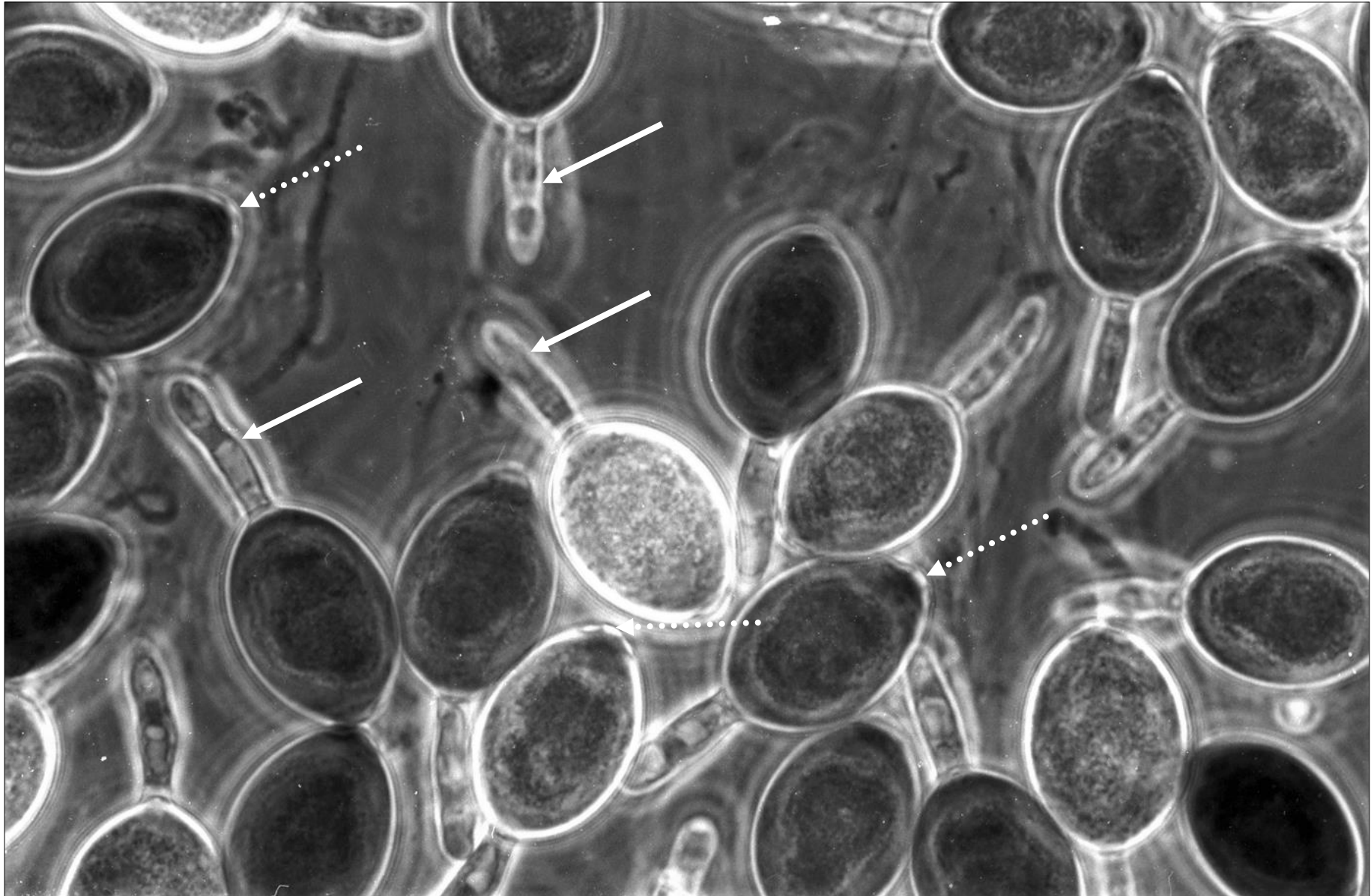
Podospora curvicolla NZ152. Ascospore germination seen 24 hours after untreated spores placed on Difco corn meal agar containing antibiotics. Photo taken after coverslip placed directly on the agar surface. Note the point of germination (solid arrows) and the collapsed pedicel (dotted arrows).



Podospora curvicola NZ152. Young ascospores in a water mount using the oil immersion objective and phase microscopy. Compare these spores with those on the next page. Here the elongate pedicels are disproportionately larger than their ellipsoidal body cells.



***Podospora curvicolla* NZ152. Ma-
ture (or nearly so) ascospores in
water mounts using the oil im-
mersion objective and phase mi-
croscopy. Note the germ pores on
the large dark cells (solid arrows)
and the occasional single eccen-
tric whiplash apical cauda (dotted
arrow). These and the single
whiplash caudae at the tip of the
pedicels are fugacious and soon
disappear.**



***Podospora curvicolla* NZ152.** Mature (or nearly so) ascospores in water mounts using the oil immersion objective and phase microscopy. Note the pedicels at the basal more-rounded ends of the large dark body cells (solid arrows). Apical germ pores (dotted arrows) are located at the slightly more tapered opposite ends of the body cells. Single lash-like gelatinous caudae at the tip of the pedicels and near the germ pores are fugacious and soon disappear.