

## *Paracoccidioides* [p'a rə kok-sid'e-oi' d'ez]

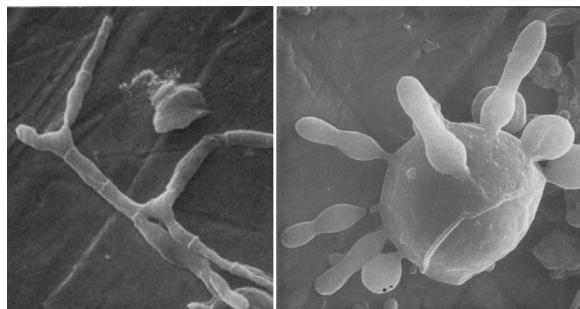
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From the Greek (*para*/ παρά + *kokkis* [coccidia]), Adolpho Lutz described *Paracoccidioides* in 1908. After analysis of oral and cervical lymph node lesions from infected patients, Lutz initially believed that he had detected *Coccidioides*. However, more extensive analysis showed that he had detected another fungus. Because of morphological and clinical disease similarities, the name *Paracoccidioides* was suggested. The prefix *para* (near) indicates its similarity with *Coccidioides*.

*Paracoccidioides* is a thermally dimorphic fungus. It grows as an infective mycelium form (at 18°C–23°C) or a parasitic multibudding yeast form (at 35°C–37°C). It is composed of 2 species:



**Figure 1.** Adolfo Lutz (1855–1940). Unknown author, Wikimedia Commons.



**Figure 2.** *Paracoccidioides brasiliensis* mycelium cells (left) and multibudding yeasts (right) by scanning electron microscopy. Original magnifications  $\times 1,500$  for the left panel and  $\times 3,000$  for the right panel. Image adapted from Vieira e Silva et al. 1974.

*P. brasiliensis* and *P. lutzii*. They are the etiologic agents of paracoccidioidomycosis. This systemic infection is endemic to Latin America (southern Mexico to northern Argentina). The highest number of cases are found in Brazil, Colombia, and Venezuela. *Paracoccidioides* conidia and mycelia are found in soil and transmitted by inhalation.

### Sources

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