# Differentiation of Candida dubliniensis from Candida albicans on rosemary extract agar and oregano extract agar

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## ABSTRACT

*Candida dubliniensis* is a recently described pathogenic species which shares many phenotypic features with *Candida albicans* and therefore, may be misidentified in microbiological laboratories. Because molecular methods can be onerous and unfeasible in routine mycological laboratories with restricted budgets such as those in developing countries, phenotypic techniques have been encouraged in the development of differential media for the presumptive identification of these species. We examined the colony morphology and chlamydospore production of 30 *C. dubliniensis* isolates and 100 *C. albicans* isolates on two new proposed media: rosemary (*Rosmarinus officinalis*) extract agar (REA) and oregano (*Origanum vulgare*) extract agar (OEA). These substrates are traditionally used as spices and medicinal herbs. In both of these media, all *C. dubliniensis* isolates (100%) showed rough colonies with peripheral hyphal fringes and abundant chlamydospores after 24 to 48 hr of incubation at 25°C. In contrast, under the same conditions, all isolates of *C. albicans* (100%) showed smooth colonies without hyphal fringes or chlamydospores. In conclusion, REA and OEA offer a simple, rapid, and inexpensive screening media for the differentiation of *C. albicans* and *C. dubliniensis*.

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