**TABLE 5** Characteristics of *Candida* spp. most commonly encountered in the clinical laboratory[a]

| Organism | Microscopic morphology on cornmeal-Tween 80 agar at 25°C | Growth: | | | Germ tubes | Urease (25°C) |
|---|---|---|---|---|---|---|
| | | In Sabouraud broth | With cycloheximide at 25°C | On SDA at 37°C | | |
| *C. albicans*<br>*C. dubliniensis* | Pseudohyphae with terminal chlamydospores; clusters of blastoconidia at septa | NSG | + | + | + | 0 |
| *C. tropicalis* | Blastoconidia anywhere along pseudohyphae | Narrow surface film with bubbles | $0^{V}$ | + | 0 | 0 |
| *C. parapsilosis* | Blastoconidia along curved pseudohyphae; giant mycelial cells | NSG | 0 | + | 0 | 0 |
| *C. lusitaniae* | Short chains of elongate blastoconidia along curved pseudohyphae | NSG | 0 | + | 0 | 0 |
| *C. guilliermondii* | Fairly short, fine pseudohyphae; clusters of blastoconidia at septa | NSG | + | + | 0 | 0 |
| *C. kefyr* (*C. pseudotropicalis*) | Elongated blastoconidia resembling "logs in a stream" along pseudohyphae | NSG | + | + | 0 | 0 |
| *C. rugosa* | Pseudohyphae with elongated blastoconidia, some in chains | NSG | 0 | + | 0 | 0 |
| *C. zeylanoides* | Pseudohyphae give feather-like appearance at low power | Pellicle (delayed) | + | $0^{V}$ | 0 | 0 |
| *C. glabrata* | No pseudohyphae; cells small; terminal budding | NSG | 0 | + | 0 | 0 |
| *C. krusei* | Pseudohyphae with cross-matchsticks or treelike blastoconidia | Wide surface film up sides of tube | 0 | + | 0 | $+^{V}$ |
| *C. lipolytica* | Elongated blastoconidia in short chains along pseudohyphae | Pellicle (delayed) | + | + | 0 | + |

[a] Abbreviations: SDA, Sabouraud dextrose agar; +, positive; 0, negative; W, reaction may be weak; V, strain variation; NSG, no surface growth.

[b] Fermentation is demonstrated by the production of *gas* (acid does not indicate fermentation).

| Assimilation of: | | | | | | | | | | | | | | Fermentation of:[b] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Glucose | Maltose | Sucrose | Lactose | Galactose | Melibiose | Cellobiose | Inositol | Xylose | Raffinose | Trehalose | Dulcitol | $KNO_3$ | Glucose | Maltose | Sucrose | Lactose | Galactose | Trehalose | Cellobiose |
| + | + | V | 0 | + | 0 | 0 | 0 | $+^{V}$ $0^{V}$ | 0 | + $0^{V}$ | 0 | 0 | + | + | 0 | 0 | V | V | 0 |
| + | + | $+^{V}$ | 0 | + | 0 | $+^{V}$ | 0 | + | 0 | + | 0 | 0 | + | + | $+^{V}$ | 0 | $+^{V}$ | $+^{V}$ | 0 |
| + | + | + | 0 | + | 0 | 0 | 0 | + | 0 | + | 0 | 0 | + | 0 | 0 | 0 | V | 0 | 0 |
| + | + | + | 0 | + | 0 | + | 0 | + | 0 | + | 0 | 0 | + | $0^{V}$ | V | 0 | $+^{V}$ | V | + |
| + | + | + | 0 | + | + | + | 0 | + | + | + | + | 0 | + | 0 | $+^{W}$ | 0 | $+^{W}$ | $+^{W}$ | 0 |
| + | 0 | + | $+^{V}$ | + | 0 | $+^{V}$ | 0 | $+^{V}$ | + | 0 | 0 | 0 | + | 0 | + | $+^{V}$ | + | 0 | 0 |
| + | 0 | 0 | 0 | + | 0 | 0 | 0 | V | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| + | 0 | 0 | 0 | $0^{V}$ | 0 | $0^{V}$ | 0 | 0 | 0 | + | 0 | 0 | $0^{W}$ | 0 | 0 | 0 | 0 | $0^{V}$ | 0 |
| + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | + | 0 | 0 | 0 | 0 | $+^{V}$ | 0 |
| + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 |
| + | 0 | 0 | 0 | V | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |