EVALUATION OF A NEW CHROMOGENIC AGAR FOR IDENTIFICATION OF *CANDIDA* SPECIES INCLUDING *CANDIDA AURIS*

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Background

Candida auris is unlike other pathogenic *Candida* species in that it has been associated with hospital outbreaks around the world. In addition to being associated with higher morbidity and mortality than other pathogenic yeast, it has also proven to be difficult to identify.

Objective: To evaluate a new chromogenic medium that can identify and differentiate clinically significant *Candida* species including *C. auris*.

Methods

51 clinical yeast isolates plated to CHROMagar™ *Candida* Plus medium

Candida auris	n=6	*Candida krusei*	n=6
Candida albicans	n=6	*Candida lusitaniae*	n=1
Candida dublinensis	n=6	*Saccharomyces cerevisiae*	n=2
Candida tropicalis	n=6	*Candida guilliermondii*	n=1
Candida glabrata	n=6	*Candida haemulonii*	n=2
Candida parapsilosis	n=1	*Candida duobushaemulonii*	n=3

Incubation Conditions:

35°C | 36-48h. | O_2

Results

***Candida* species:** specified colours per CHROMagar™ *Candida* Plus package insert

Candida auris

Front side | Back side

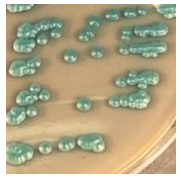
Light blue w/ blue halo
Blue back side

Candida albicans

Front side

Blue green

Candida dublinensis



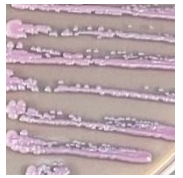
Front side

Candida tropicalis

Front side

Metallic Blue w/ pink halo

Candida glabrata



Front side

Mauve

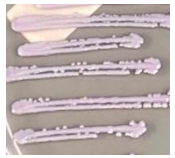
Candida krusei

Front side

Pink and Fuzzy

Other yeast species: no specified colours

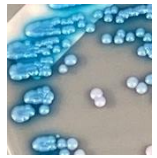
Candida lusitaniae



Saccharomyces cerevisiae

Candida parapsilosis

Candida guilliermondii



Candida duobushaemulonii

Candida haemulonii

Results Summary and Conclusions

- CHROMAgar™ *Candida* Plus agar performs accurately in the identification and differentiation of common pathogenic *Candida* species including *C. auris*
  - 41/41 *Candida* species gave 100% concordance to expected colours per package insert
  - *C. auris* is easily differentiated from other *Candida* species including the closely related *C. duobushaemulonii* and *C. haemulonii*
- Mauve/pink colonies were identified among multiple yeast species and require species confirmation by an alternate method
- *Candida guilliermondii* produces a colony colour similar to *C. tropicalis* without a pink halo
- Though not specifically studied here, this media may have utility for *C. auris* screening, mixed yeast cultures and yeast identification directly from clinical specimens.

Thank you to Micronostyx for supplying the media used in this study.

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