Three selective media (chromID C. difficile agar, taurocholate cycloserine cefoxitin agar [TCCA; homemade], and CLO medium) were compared from 406 stool samples of patients suspected of having Clostridium difficile infection. The sensitivities of chromID C. difficile agar at 24 h and 48 h, CLO medium, and TCCA were 74.1%, 87%, 85.2%, and 70.4%, respectively.
TABLE 1 Sensitivities of chromID C. difficile agar, CLO, and TCCA

<table>
<thead>
<tr>
<th>No. of stools</th>
<th>Result on:</th>
<th>chromID C. difficile agar (24 h)</th>
<th>chromID C. difficile agar (48 h)</th>
<th>CLO medium (48 h)</th>
<th>TCCA (48 h)</th>
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</tr>
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</table>

Sensitivity (%) 74.1 87 85.2 70.4

For the in vitro comparison of sensitivity, there was a significant difference in the recovery of C. difficile across the different media (P < 0.05). The mean concentrations (± standard deviations) of C. difficile on chromID C. difficile agar plates after 24 h of incubation, chromID C. difficile agar plates after 48 h of incubation, CLO plates, and TCCA plates were 5.84 ± 1.58, 6.27 ± 1.3, 5.45 ± 1.55, and 5.96 ± 1.25 CFU/ml, respectively. When the media were compared pairwise, only CLO medium was significantly less sensitive than the chromID C. difficile agar at 48 h (Tukey’s multiple comparison test, <0.05).

chromID C. difficile agar is a new chromogenic medium containing taurocholate and a chromogen mix that allows isolation and identification of C. difficile strains in 24 h. Only a few studies have evaluated this medium. Alcala et al. found a sensitivity of 90.2% at 24 h using a combination of 3 media as the gold standard (6). Perry et al. found a sensitivity of 96.3% for chromID C. difficile agar after 24 h incubation when an alcohol shock prior to inoculation was used (7). In contrast with the conclusions of Perry et al., who do not recommend incubating plates beyond 24 h, we found that prolonging incubation for 48 h in cases of negative results at 24 h enhanced recovery of C. difficile strains on chromID C. difficile agar. However, extending incubation adds turnaround time and indirect costs. On TCCA medium, abundant endogenous flora compromised C. difficile isolation and recognition, in contrast to chromID C. difficile agar at 24 h, where endogenous flora was absent in 67.7% of the media, thereby facilitating the reading of the plates. Culture allows isolation of C. difficile strains, but a second step is necessary to determine the in vitro toxigenicity of the strain. The use of a chromogenic medium that was recently evaluated by Darkoh et al., which contains a chromogenic substrate that differentiates toxigenic from nontoxigenic strains in a single step, could be a good option (8).

![FIG 1](http://jcm.asm.org) Comparison of sensitivity (A) and selectivity (B) of different selective media for C. difficile isolation.
Identification of *C. difficile* on chromID *C. difficile* agar in 24 h is easy due to the color of the colonies and its selectivity. However, this medium exhibits the best sensitivity at 48 h.

**ACKNOWLEDGMENT**

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**REFERENCES**