**Abstract: A Novel Culture Medium for Isolation of *Malassezia furfur***

***Maksudov M.R., Khonkhodjaev Sh.Sh.***

**Republican Specialized Scientific-practical Medical Center Of Dermatovenereology And Cosmetology**

**Objectives:**  
The aim of this study was to develop an optimized culture medium for the selective isolation and growth of *Malassezia furfur* from clinical samples while inhibiting the growth of other yeast species. Current culture media do not fully meet the metabolic requirements of *M. furfur*, necessitating an alternative formulation to enhance diagnostic efficiency.

**Methods:**  
A novel culture medium was formulated based on rabbit meat extract with additional selective components, including peptone, agar-agar, bile acid salts, Tween-40, glycerol, olive oil, whole cow’s milk, chloramphenicol, and fluconazole. The composition was adjusted to optimize pH (5.7–6.4) and ensure stable growth conditions. The medium was compared to Sabouraud’s agar with cottonseed oil and modified Dixon’s agar for its ability to support *M. furfur* growth and inhibit contaminants. Clinical samples from 65 patients were simultaneously inoculated onto the three media, incubated at 37°C for 48 hours, and analyzed for colony morphology, growth rate, and efficiency in fungal recovery.

**Results:**  
The novel culture medium demonstrated a significantly higher isolation rate of *M. furfur* (84.6%) compared to Dixon’s medium (81.5%) and Sabouraud’s agar with cottonseed oil (46.1%). Colonies of *M. furfur* appeared larger, cream-colored, and exhibited characteristic waxy textures, allowing for easy differentiation from other yeast species. The selective composition effectively inhibited the growth of competing fungi, improving diagnostic specificity.

**Conclusions:**  
The newly developed culture medium provides a superior method for isolating *M. furfur* from clinical specimens, with enhanced selectivity and growth support compared to conventional media. Its application may improve the accuracy of dermatological and mycological diagnostics, particularly in cases where rapid and precise fungal identification is required. Further validation studies are needed to assess its utility in broader clinical settings.