Abstract

Considering the industrial interest of poly-b-hydroxy butyrate (PHB) and its high production cost, work has been undertaken for the production of PHB by Alcaligenes latus (2311). Different industrial wastes (sesame, molasses, sago and paper waste) were used as a cheap substrate to minimize the production of cost and nitrogen limited minimal agar synthetic medium was also used for comparison. Accumulation of PHB granules in the organism was analyzed by sudan black method. The PHB production in various industrial waste based medium and nitrogen limited minimal agar synthetic medium was studied by crotonic acid method. The pure form of PHB was collected and qualitatively analyzed by infrared and nuclear magnetic resonance methods. Highest PHB production was found in nitrogen limited minimal agar synthetic medium. Among the various industrial wastes based media, highest yield was obtained with
sesame oil waste as carbon source

References

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Index Terms

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