Recovery of c-phycocyanin from the cyanobacterium Spirulina maxima

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Abstract

Spirulina biomass was separated into two fractions which may have various uses. A phycocyanin fraction may provide a food colourant and biomarkers, and a protein-rich leftover may be useful as aquaculture feed. Activated charcoal adsorption, ultrafiltration and spray drying were used effectively to produce a high quality colourant grade phycocyanin, while activated charcoal adsorption, ammonium sulphate precipitation, dialysis and chromatography were effective in preparing reagent grade phycocyanin.

Keywords Microalgae, Spirulina, Phycocyanin