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Undergraduate Research: Comparison of quantification methods for Kjeldahl protein digestions of wild fruits

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ABSTRACT:

Migrating birds depend, in part, upon local wild fruits to get needed nutriment for energetically-costly long distance migrations. We have studied several nutrients in local wild fruit supplies in our laboratory, but this study represents our first protein measurements. Traditional Kjeldahl digestions were performed first on 'model proteins' and wild fruits found in Rochester, NY. After Kjehldahl digestion, 'model proteins' and fruit samples were quantified for protein content with a traditional titration method and also using an automated total nitrogren analyzer. Both quantification methods performed well for different analyses, and results of the two methods were compared.

BIO:
Elder Berroa is a graduate of the Laboratory Science Technology program at the National Technical Institute for the Deaf and is currently enrolled in RIT's Chemistry program. He completed a co-op with Dow Chemical and received the Outstanding Chemistry Student Award from the Rochester Section of the American Chemical Society.