



ANALYTICAL REPORT

TO: Aloha Medicinals
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DATE: November 24, 2006

Sample: Cordyceps – 8869	Lot Number: hot
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Analyte	Result	Unit
Cordycepin (mw 251.24)	0.0309	% wt
Adenosine (mw 264.24)	0.9989	% wt
Ethyl-Adenosine (mw 295.12)	0.0188	% wt
Hydroxyethyl-adenosine (mw 311.12)	0.0416	% wt
Polysacchrides	40.76	% wt

Cordycepin and adenosine analysis performed by method of Furuya, T., Hirotsu, M., Matsuzawa, M., "Studies On The Metabolites Of Higher Fungi .1. N6-(2-Hydroxyethyl) Adenosine, A Biologically-Active Compound From Cultured Mycelia Of Cordyceps And Isaria Species", as published in Phytochemistry 22 (11): 2509-2512 1983; utilizing a Vydac peptide and protein C18 column (300x3.0 mm, with 48x4.6mm guard column). Mobile phase of potassium phosphate buffer (pH 6.8 - 0.025M KH₂PO₄, and K₂HPO₄, with 0.05M KCl), 1ml/min. Peak identification performed on 10% w/v solution of eluent into an atmospheric pressure chemical interface for solvent removal and particle atomization and then via fused silica line into a mass spectrometer inlet with capillary sheath at 400°C with helium carrier gas, corona voltage at 5KV (2μA). Total polysaccharide was assayed by the phenol/sulfuric acid method. The polysaccharides were hydrolyzed in sealed tubes with 2 MTEA at 100°C for 5 h. The hydrolyzates were evaporated to dryness. The residue was repeatedly evaporated with methanol until the acid had been completely removed. The molar ratios of neutral sugars were determined by converting them to their alditol acetates which were separated and quantified by GC on a DB-225 fused silica capillary column at 210°C (15 m X 0.25 mm, J&W Scientific). Standard reference materials obtained from Sigma-Aldrich.

Dinesh Patel, Ph.D.
Laboratory Director

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