WORLD BOTANICAL ASSOCIATES
P.O. Box 2829
Laurel, MD 20708-0829

October 22, 1984

Dr. John M. Cassady, Professor and Head
Department of Medicinal Chemistry and Pharmacognosy
Purdue University
West Lafayette, Indiana 47907

ACCESSION/PIECES	NAME/FAMILY	DESCRIPTION/WEIGHT	COLLECTOR-NO./DATE-ORIGIN
WBA-47 1 bag	Anomodon attenuatus (Hedw.) Hueb. Thuidiaceae	Moss on stembark (algae not evaluated) 3/8 lbs.	SPJUT-8497A 8/25/84 Tennessee & N. Carolir
WBA-48 1 bag	Anomodon attenuatus (Hedw.) Hueb. Thuidiaceae	Moss on stembark (algae none or rare) 7/8 lbs.	SPJUT-8497A 8/25/84 Tennessee & N. Carolir
WBA-49 1 bag	Anomodon attenuatus (Hedw.) Hueb. Thuidiaceae	Moss on stembark (algae occasional) 3/8 lbs.	SPJUT-8497A 8/25/84 Tennessee & N. Carolir
WBA-50 1 bag	Anomodon attenuatus (Hedw.) Hueb. Thuidiaceae	Moss on stembark (algae frequent) 1/8 lbs.	SPJUT-8497A 8/25/84 Tennessee & N. Carolir
WBA-51 1 bag	Anomodon attenuatus (Hedw.) Hueb. Thuidiaceae	Moss on stembark (algae common) 1/8 lbs.	SPJUT-8497A 8/25/84 Tennessee & N. Carolir

WBA ACCESSION RECORD FOR DR. JOHN M. CASSADY, PURDUE UNIVERSITY, WEST LAFAYETTE, INDIANA

WBA-52	Anomodon attenuatus (Hedw.) Hueb.	Moss on top of stones (70% N or R, 20% O, 10% F)			SPJUT-8497B
1 bag	Thuidiaceae	3.0 lbs.	8/25/84	Tennessee & N. Carolina	
WBA-53	Anomodon rostratus (Hedw.) Schimp.	Moss on stembark/rock (algae N or R)			SPJUT-8498
1 bag	Thuidiaceae	1 & 1/8 lbs.	8/25/84	Tennessee & N. Carolina	
WBA-54	Anomodon rostratus (Hedw.) Schimp.	Moss on stembark/rock (algae O)			SPJUT-8498
1 bag	Thuidiaceae	¼ lbs.	8/25/84	Tennessee & N. Carolina	
WBA-55	Anomodon rostratus (Hedw.) Schimp.	Moss on stembark/rock (algae F)			SPJUT-8498
1 bag	Thuidiaceae	¼ lbs.	8/25/84	Tennessee & N. Carolina	
WBA-56	Anomodon rostratus (Hedw.) Schimp.	Moss on stembark/rock (algae not Ev)			SPJUT-8498
1 bag	Thuidiaceae	2¼ lbs.	8/25/84	Tennessee & N. Carolina	
WBA-57	Anomodon attenuatus (Hedw.) Hueb.	Moss on top of stones(90%)/sb(5%)/RF 5%) 59% N or R, 33% O, 8% F			SPJUT-8954
8 bags	Thuidiaceae	20½ lbs.	10/7/84	West Virginia	

ABBREVIATIONS

Ev = Evaluated
F = Frequent
N = None
O = Occasional
R = Rare
RF = Rock Face
Sb = Stembark

Frequencies indicated are for blue-green types (Cyanophyta) belonging to the Chroococcales. Tennessee/N. Carolina samples include the following algae genera in order of relative abundance: Dermocarpa, Microcystis, Aphanocapsa,

Stigmacarpon, & Nostoc. Filamentous species were noted to be frequent in some examinations. Frequencies are subjective determinations:

None or Rare - less than 1 alga colony of any species per moss branch 1-2 cm in length
Occasional - 1-5 colonies per branch
Frequent - more than 5 colonies per branch, but less than 1 per leaf
Common - 1-several colonies per leaf
Abundant - many colonies per leaf

Each determination entailed many microscopic examinations of randomly selected specimens.[1] Number of specimens examined were: 40 for A. attenuatus from stembark (WBA-48 - 51), 9 from rock (WBA-52), and 12 primarily from rock (WBA-57), and 35 for A. rostratus (WBA-53-56) from stembark and rock. An average of 8 minutes was spent in preparation and microscopic (125x & 250x) examination of each specimen.

ALGAE FREQUENCY TABLE

	None or Rare	Occasional	Frequent	Common	Abundant
A. attenuatus sb (WBA-48-51)					
By Weight:[2]	58%	25%	8%	8%	*
By Count:	43%	30%	15%	8%	5%
A. attenuatus rock (WBA-52)	70%	20%	10%	0	0
A. attenuatus rock (WBA-57)	59%	33%	8%	0	0
A. rostratus rock/sb (WBA-53-55)					
By Weight:	69%	15%	15%	*	0
By Count:	68%	17%	11%	3%	0

*Weight in this instance was neglible and material was thrown in with preceding category.

WBA ACCESSION RECORD FOR DR. JOHN M. CASSADY, PURDUE UNIVERSITY, WEST LAFAYETTE, INDIANA

REF.

WBA-Summer Sale, $5.00 per pound
Your letter, June 4, 1984
WBA-Letter August 31, 1984

TOTAL

11 samples, 29 ¼ pounds at $5.00 per pound = $146.25

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[1]No Charge for sorting samples by relative abundance of blue-green algae
No Charge for microscopic examinations

[2]There may be significant variation in the frequency of blue-green algae among individual plants for each fragment or clone. Also, fragments varied considerably in weight. For example, there were 17 fragments of A. attenuatus sb with none or rare occurrences of blue-green algae which weighed a total of approximately .357 lbs. Dividing this figure by 17 gives the average weight of 0.021 lbs per fragment.

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ACCESSION AND INVOICE RECORD

October 29, 1985

TO: Dr. Gordon M. Cragg, Ph.D
Natural Products Branch
National Cancer Institute, NIH
Bethesda, Maryland 20205

PURCHASE ORDER NO. 263-AD-S60001

ACCESSION/# PIECES	NAME/FAMILY - DESCRIPTION	COLL.-NO./QUANTITY	DATE/LOCATION
WBA-223 1 bags(s)	Helodium paludosum (Sull.) Aust. Thuidiaceae moss on grassy soil	SPJ 9305 3.5 lbs.	October 15, 1985 MARYLAND
WBA-224 4 bags(s)	Anomodon attenuatus (Hedw.) Hueb. Thuidiaceae moss on rock	SPJ 9306 20 lbs.	September 9, 1985 WEST VIRGINIA
WBA-225 1 bags(s)	Anomodon viticulosus (L.) Hook. & Tayl. Thuidiaceae moss on rock	SPJ 9307 1 kg	September 9, 1985 WEST VIRGINIA

SUBTOTALS: Anomodon attenuatus - $8 per lb. x 20 lbs. = $160.00
Shipping.....$ 10.00

Anomodon viticulosus .....$ 65.00
Helodium paludosum .....$ 65.00

TOTAL $300.00

Samples shipped to: Dr. John M. Cassady, Professor and Head
Department of Medicinal Chemistry and Pharmacognosy
Purdue University, West Lafayette, Indiana 47907

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ACCESSION AND INVOICE RECORD

December 18, 1986

TO: Dr. Gordon M. Cragg, Ph.D
Natural Products Branch
National Cancer Institute, NIH
Bethesda, Maryland 20205

PURCHASE ORDER NO.

ACCESSION/# PIECES	NAME/FAMILY - DESCRIPTION	COLL.-NO./QUANTITY	DATE/LOCATION
WBA-457* 1 bags(s)	Anomodon rostratus (Hedw.) Schimp. THUIDIACEAE moss on rock	SPJ 10151 1 kg	November 8, 1986 WEST VIRGINIA
WBA-458 8 bags(s)	Anomodon attenuatus (Hedw.) Hueb. THUIDIACEAE moss on rock	SPJ 10152 76 lb.	November 16, 1986 WEST VIRGINIA
WBA-459 1 bags(s)	Anomodon attenuatus (Hedw.) Hueb. THUIDIACEAE old & new moss mixed with soil**	SPJ 10152 23 lb.	November 16, 1986 WEST VIRGINIA

TOTAL: 76 lb x $10/lb = $760.00

No charge for Anomodon rostratus

**No charge. This sample was obtained by vigorously shaking Anomodon attenuatus over a metal screen after it is has dried. The material that fell through the screen (WBA-459) consists of naturally dead and live materials of A. attenuatus mixed with soil. It is recommended that this sample be tested. Another 50 pounds of this type of material was discarded.