



## REFERENCE

- Abdellatif, M. A., A. M. Abou-Elnaga, M. H. Ali, P. M. Shakir and M. K. Al-Jalili "Biometrical Studies on Iraqi Honeybees" Journal of Apicultural Research, 16(3), 143-144, 1977.
- Akratanakul, P., "The Natural History of the Dwarf Honey Bee, Apis florea in Thailand." PhD.thesis, Cornell University, 91 pp., 1977.
- Alpatov, W. W., "Variation of Hooks on the Hind Wing of the Honeybee (Apis mellifera L.)" Biological Bulletin, 55(3), 209-234, 1928.
- \_\_\_\_\_. "Biometrical Studies on Variation and Races of the Honeybee (Apis mellifera L.)" Quarterly Review of Biology, 4(1), 1-58, 1929.
- \_\_\_\_\_. "Some Data on the Comparative Biology of Different Bee Races" Bee World, 13, 138-139, 1932.
- \_\_\_\_\_. "South African Bees Biometrically Investigated" Bee World, 14, 62-64, 1933.
- Bingham, C. T., "Fauna of British India : Hymenoptera Vol.1 (Wasp and Bees)" pp.557-559, Taylor and Francis, London.
- Buco, S. M., T. E. Rinderer, H. A. Sylvester, A. M. Collins, V. A. Lancaster and R.M. Crewe, "Morphometric Differences between South American Africanized and South African (Apis mellifera scutellata ) Honey Bees" Apidologie, 18(3), 217-222, 1987.
- Carlisle, E., "Biometrical Investigation of some European and other Races of Honeybees " Bee World, 36(3), 41-45, 1955.
- Culliney, T. W., "Origin and Evolutionary History of the Honeybees Apis" Bee World , 64(1), 29-38 , 1983.
- \_\_\_\_\_. "Geological History and Evolution of the Honey Bee" American Bee Journal, 123(8), 580-585, 1983.

- Daly, H. V., "Insect Morphometrics" Annual Review of Entomology, 30, 415-438, 1985.
- \_\_\_\_\_ . and S. S. Balling "Identification of Africanized Honeybees in the Western Hemisphere by Discriminant Analysis" Journal of the Kansas Entomological Society, 51(4), 857-869, 1978.
- \_\_\_\_\_ . K. Holemer, P. Norman, and T. Allen "Computer-Assisted Measurement and Identification of Honey Bees (Hymenoptera : Apidae)" Annals of the Entomological Society of America, 75(6), 591-594, 1982.
- Dupraw, E. J., "Non-Linear Taxonomy" Nature, 202(4935), 849-852, 1964.
- \_\_\_\_\_ . "The Recognition and Handling of Honeybee Specimens in Non-Linnean Taxonomy." Journal of Apicultural Research, 4(2), 71-84, 1965.
- Dutton, R. W., F. Ruttner, A. Berkeley and M. J. D. Manley, "Observations on the Morphology, Relationships and Ecology of Apis mellifera of Oman" Journal of Apicultural Research, 20(4), 201-214, 1981.
- Kshirsagar, K. K. and D. R. Ranade, "Morphometric Characterization of Indian Hive Bee Apis cerana indica F. (Apidae , Hymenoptera), Worker" Journal of the University of Poona , Science and Technology, 54, 101-120, 1981.
- Koeniger, N., G. Koeniger, S. Tingek, M. Mardan and T. E. Rinderer, "Reproductive Isolation by Different time of Drone Flight between Apis cerana Fabricius, 1793 and Apis vechtii (Maa, 1953)" Apidologie, 19(1), 103-106, 1988.
- Maa, T., "An Inquiry into the Systematics of the Tribus Apidini or (Hym.)" Treubia, 21(3), 525-640, 1953.
- Mattu, V. K. and L. R. Verma, "Comparative Morphometric Studies on the Indian Honeybee of the North-West Himalayas . 1. Tongue and

- Antenna." Journal of Apicultural Research, 22(2), 79-85, 1983.
- \_\_\_\_\_. "Comparative Morphometric Studies on the Indian Honeybee of the North-West Himalayas. 2. Wings." Journal of Apicultural Research, 23(1), 3-10, 1984.
- \_\_\_\_\_. "Comparative Morphometric Studies on the Indian Honeybee of the North-West Himalayas. 3. Hind leg, Tergites and Sternites." Journal of Apicultural Research, 23(3), 117-122, 1984.
- \_\_\_\_\_. "Comparative Morphometric Studies on the Indian Honeybee, Apis cerana indica F. Effect of Seasonal Variations" Apidologie, 15(1), 63-74, 1984.
- Michener, C. D., The Social Behavior of the Bees : A Comparative study, The Belknap Press of Harvard University Press, Cambridge, Massachusetts. 404 pp. 1974.
- Mikhailoff, A. S., "A Summary of what we know about Long-tongued Bees" American Bee Journal, 70(11), 532-533, 1930.
- Morimoto, H., "Investigation on A Method of Measuring Abdominal Size in Worker Honeybees, Apis mellifera ligustica and Apis cerana cerana" Journal of Apicultural Research, 4(1), 17-21, 1965 .
- \_\_\_\_\_. "The use of the Labial Palpus as a Measure of Proboscis Length in Worker Honeybees Apis mellifera ligustica and Apis cerana cerana" Journal of Apicultural Research, 7(3), 147-150, 1968.
- Pothichot, S., "Production and Artificial Insemination of Queen Bees (Apis cerana Fabricius) M.Sc. Thesis, Chulalongkorn University 100 pp., 1988 (In Thai).
- Rinderer, T. E., "Measuring the Heritability of Characters of Honeybees" Journal of Apicultural Research, 16(1), 95-98, 1977.
- \_\_\_\_\_. "Improved simple technique for identifying Africanized and

- European Honey Bees." Apidologie, 18(2), 179-196, 1987.
- \_\_\_\_\_. H. A. Sylvester, A. M. Collins and D. Pesante, "Identification of Africanized and European Honey Bees: Effects of Nurse bee Genotype and Comb size" Bulletin of the Entomological Society of America, 32(3), 150-152, 1985.
- \_\_\_\_\_. H. A. Sylvester, M. A. Brown, J. D. Villa, D. Pesante and A.M. Collins, "Field and Simplified Techniques for identifying Africanized and European Honey Bee" Apidologie, 17(1), 33-48, 1986.
- Ruttner, F., "Isolated Populations of Honeybees in Australia" Journal of Apicultural Research, 15(3), 97-104, 1976.
- \_\_\_\_\_. "Characteristics and Geographic Variety of Apis cerana Fabr." Proceeding of the xxxth International Apicultural Congress, p.49-50, Nagoya, Japan, 1985.
- \_\_\_\_\_. "Geographical Variability and Classification" Bee Genetics and Breeding (Rinderer, T.E. editor), p. 23-56, Academic Press Inc., New York, 1986.
- \_\_\_\_\_. "Principles of Geographic Variation in Honey Bees" Africanized Honey Bees and Bee Mites, p. 251-259, Ellis Horwood Limited, Chichester, England, 1987.
- \_\_\_\_\_. "Biogeography and Taxonomy of Honeybees", Springer-Verlag, Berlin, Heidelberg, 284 pp. 1988.
- Sartono, S., "On Pleistocene Migration Routes of Vertebrate Fauna in Southeast Asia" Bulletin of Geological Society of Malaysia, 6:273-286, 1973.
- Singh, M. P., L. R. Verma and H. V. Daly, "Morphometric analysis of the Indian Honeybee in the North-east Himalayas Region" Journal of Apicultural Research, (manuscript)

- Snodgrass, R. E., Anatomy and Physiology of the Honeybee, pp. 147-263, McGraw-Hill Book Company, New York, 1925.
- \_\_\_\_\_. "The Anatomy of the Honeybee" The Hive and the Honey Bee (Dadant & Sons, eds.), pp. 75-121, Dadant & Sons, Inc., Hamilton, Illinois, Revised edition, 1975.
- Sylvester, H. A. and T.E. Rinderer, "Africanized Bees: Progress in Identification Procedures" American Bee Journal, 126(5), 330-333, 1986.
- \_\_\_\_\_. and S. Wongsiri, "Beekeeping and Research Needs in Thailand" Apiacta, 21, 119-125, 1986.
- \_\_\_\_\_. and T.E. Rinderer, "Fast Africanized Bee Identification System (FABIS) Manual" American Bee Journal, 127(7), 511-516, 1987.
- Tingek, S., M. Mardan, T. E. Rinderer, N. Koeniger and G. Koeniger, "Rediscovery of Apis vecti (Maa, 1953): the Saban Honey Bee" Apidologie, 19(1), 97-102, 1988.
- Wilson, E. O., The Insect Society, pp. 75-102, Harvard University Press, 1971.
- Wongsiri, S., "Regulation of Apis cerana Absconding During a Dearth Period (Abstr.)" Proceeding of the XXXIst International Apicultural Congress of Apimondia, Warsaw, Poland, 1987.
- \_\_\_\_\_. "Queen Production" Advanced Course in Beekeeping with Apis cerana in Tropical and Subtropical Asia, pp. 1-23, Universiti Pertanian Malaysia, Serdang, Selangor Darul Ehsan, 1989.
- \_\_\_\_\_. Y. Lai and Z. Liu, "Beekeeping in the Guangdong Province of China and some Observations on the Chinese Honey Bee Apis cerana cerana and the European Honey Bee Apis mellifera ligustica," American Bee Journal, 126(11), 748-752, 1986.

\_\_\_\_\_, S. Pothichot and F. Chao, " Queen Rearing with Apis cerana in Thailand," IVth International Conference on Apiculture in Tropical Climate, Cairo, Egypt, 1988.

\_\_\_\_\_. and P. Tangkanasing, "Apis cerana F. Beekeeping in Thailand: Problems and Research needs" Journal of Scientific Research Chulalongkorn University, 11(1), 1-6, 1986.

Wu, Y. and K. Bangyu, "Two species of Small Honeybee: A Study of the Genus Micrapis" Bee World, 68(3), 153-155, 1987.

APPENDIX

Table 17 Collection of Apis cerana in Thailand and Malaysian Peninsula

OBS	CODE	COLONY	SITE	PROVINCE	COUNTRY
1	A	K1001	BAN NONG WAN	CHIENG RAI	THAILAND
2	A	K1003	BAN NONG WAN	CHIENG RAI	THAILAND
3	A	K1005	BAN NONG WAN	CHIENG RAI	THAILAND
4	A	K1007	BAN NONG WAN	CHIENG RAI	THAILAND
5	A	K1008	BAN NONG WAN	CHIENG RAI	THAILAND
6	B	K1101	ANG KHANG HILL	CHIENG MAI	THAILAND
7	B	K1102	ANG KHANG HILL	CHIENG MAI	THAILAND
8	C	K1103	TUNG SEAW	CHIENG MAI	THAILAND
9	C	K1104	TUNG SEAW	CHIENG MAI	THAILAND
10	D	K1201	WAT SRI BOON YUEN	LAMPHUN	THAILAND
11	D	K1203	WAT SRI BOON YUEN	LAMPHUN	THAILAND
12	D	K1205	WAT SRI BOON YUEN	LAMPHUN	THAILAND
13	D	K1206	WAT SRI BOON YUEN	LAMPHUN	THAILAND
14	D	K1208	WAT SRI BOON YUEN	LAMPHUN	THAILAND
15	E	K1301	HANG CHAT	LAMPANG	THAILAND
16	F	K1401	PHRAE	PHRAE	THAILAND
17	F	K1402	PHRAE	PHRAE	THAILAND
18	F	K1403	PHRAE	PHRAE	THAILAND
19	F	K1404	PHRAE	PHRAE	THAILAND
20	G	K1502	THA IT	UTRADIT	THAILAND
21	G	K1504	THA IT	UTRADIT	THAILAND
22	G	K1506	THA IT	UTRADIT	THAILAND
23	H	K1511	THA SAO	UTRADIT	THAILAND
24	I	K1513	FAY LUANG	UTRADIT	THAILAND
25	J	K1601	PHITSANULOK	PHITSANULOK	THAILAND
26	J	K1602	PHITSANULOK	PHITSANULOK	THAILAND



Table 17 (cont.) Collection of Apis cerana in Thailand and Malaysian Peninsula

OBS	CODE	COLONY	SITE	PROVINCE	COUNTRY
27	J	K1603	PHITSANULOK	PHITSANULOK	THAILAND
28	J	K1604	PHITSANULOK	PHITSANULOK	THAILAND
29	J	K1605	PHITSANULOK	PHITSANULOK	THAILAND
30	K	K2001	BAN PHUE	UDONTHANI	THAILAND
31	K	K2005	BAN PHUE	UDONTHANI	THAILAND
32	K	K2008	BAN PHUE	UDONTHANI	THAILAND
33	K	K2010	BAN PHUE	UDONTHANI	THAILAND
34	K	K2012	BAN PHUE	UDONTHANI	THAILAND
35	L	K2014	BAN NIKOM	UDONTHANI	THAILAND
36	L	K2018	BAN NIKOM	UDONTHANI	THAILAND
37	M	K2021	BAN THON	UDONTHANI	THAILAND
38	N	K2022	UDONTHANI	UDONTHANI	THAILAND
39	O	K2024	BANNONGWUASAW	UDONTHANI	THAILAND
40	O	K2025	BANNONGWUASAW	UDONTHANI	THAILAND
41	O	K2026	BANNONGWUASAW	UDONTHANI	THAILAND
42	P	K2101	KHONKAEN	KHONKAEN	THAILAND
43	P	K2105	KHONKAEN	KHONKAEN	THAILAND
44	P	K2107	KHONKAEN	KHONKAEN	THAILAND
45	P	K2109	KHONKAEN	KHONKAEN	THAILAND
46	P	K2110	KHONKAEN	KHONKAEN	THAILAND
47	Q	K2201	PAK CHONG	NAKHONRATSIMA	THAILAND
48	Q	K2206	PAK CHONG	NAKHONRATSIMA	THAILAND
49	R	K2210	SUNG NUEN	NAKHONRATSIMA	THAILAND
50	R	K2213	SUNG NUEN	NAKHONRATSIMA	THAILAND
51	R	K2216	SUNG NUEN	NAKHONRATSIMA	THAILAND
52	S	K2301	NONG KHAI	NONG KHAI	THAILAND

Table 17 (cont.) Collection of Apis cerana in Thailand and Malaysian Peninsula

OBS	CODE	COLONY	SITE	PROVINCE	COUNTRY
53	T	K2401	UBONRATCHATHANI	UBONRATCHATHANI	THAILAND
54	U	K3001	BANG KHAN TAK	SAMUTSONGKHRAM	THAILAND
55	U	K3002	BANG KHAN TAK	SAMUTSONGKHRAM	THAILAND
56	U	K3003	BANG KHAN TAK	SAMUTSONGKHRAM	THAILAND
57	U	K3004	BANG KHAN TAK	SAMUTSONGKHRAM	THAILAND
58	U	K3005	BANG KHAN TAK	SAMUTSONGKHRAM	THAILAND
59	U	K3010	BANG KHAN TAK	SAMUTSONGKHRAM	THAILAND
60	U	K3014	BANG KHAN TAK	SAMUTSONGKHRAM	THAILAND
61	U	K3019	BANG KHAN TAK	SAMUTSONGKHRAM	THAILAND
62	U	K3023	BANG KHAN TAK	SAMUTSONGKHRAM	THAILAND
63	U	K3027	BANG KHAN TAK	SAMUTSONGKHRAM	THAILAND
64	U	K3034	BANG KHAN TAK	SAMUTSONGKHRAM	THAILAND
65	U	K3037	BANG KHAN TAK	SAMUTSONGKHRAM	THAILAND
66	U	K3038	BANG KHAN TAK	SAMUTSONGKHRAM	THAILAND
67	U	K3039	BANG KHAN TAK	SAMUTSONGKHRAM	THAILAND
68	U	K3040	BANG KHAN TAK	SAMUTSONGKHRAM	THAILAND
69	U	K3041	BANG KHAN TAK	SAMUTSONGKHRAM	THAILAND
70	V	K3101	KARURAJ	RATBURI	THAILAND
71	V	K3102	KARURAJ	RATBURI	THAILAND
72	V	K3103	KARURAJ	RATBURI	THAILAND
73	W	K3105	JOM BUENG	RATBURI	THAILAND
74	W	K3108	JOM BUENG	RATBURI	THAILAND
75	X	K3204	RAI SOM	PHETCHABURI	THAILAND
76	Y	K3211	BAN LAEM	PHETCHABURI	THAILAND
77	Z	K3214	TA LAENG	PHETCHABURI	THAILAND
78	Z	K3216	TA LAENG	PHETCHABURI	THAILAND

Table 17 (cont.) Collection of Apis cerana in Thailand and Malaysian Peninsula

OBS	CODE	COLONY	SITE	PROVINCE	COUNTRY
79	a	K3217	MARKET	PHETCHABURI	THAILAND
80	b	K4002	BAN NONG KRANG	CHONBURI	THAILAND
81	b	K4004	BAN NONG KRANG	CHONBURI	THAILAND
82	b	K4006	BAN NONG KRANG	CHONBURI	THAILAND
83	b	K4010	BAN NONG KRANG	CHONBURI	THAILAND
84	b	K4012	BAN NONG KRANG	CHONBURI	THAILAND
85	b	K4016	BAN NONG KRANG	CHONBURI	THAILAND
86	b	K4018	BAN NONG KRANG	CHONBURI	THAILAND
87	c	K4101	PANG LARD	RAYONG	THAILAND
88	c	K4103	PANG LARD	RAYONG	THAILAND
89	d	K4105	KLONG POON	RAYONG	THAILAND
90	d	K4106	KLONG POON	RAYONG	THAILAND
91	d	K4107	KLONG POON	RAYONG	THAILAND
92	d	K4108	KLONG POON	RAYONG	THAILAND
93	e	K4202	KRATING	CHANTHABURI	THAILAND
94	f	K4203	THA CHALAB	CHANTHABURI	THAILAND
95	f	K4204	THA CHALAB	CHANTHABURI	THAILAND
96	f	K4205	THA CHALAB	CHANTHABURI	THAILAND
97	g	K4206	PONG NAM RON	CHANTHABURI	THAILAND
98	h	K4207	TUNG BENJA	CHANTHABURI	THAILAND
99	h	K4212	TUNG BENJA	CHANTHABURI	THAILAND
100	i	K5001	CHUMPHON	CHUMPHON	THAILAND
101	i	K5004	CHUMPHON	CHUMPHON	THAILAND
102	j	K5010	SA WEE	CHUMPHON	THAILAND
103	j	K5013	SA WEE	CHUMPHON	THAILAND
104	j	K5015	SA WEE	CHUMPHON	THAILAND

Table 17(cont.) Collection of Apis cerana in Thailand and Malaysian Peninsula

OBS	CODE	COLONY	SITE	PROVINCE	COUNTRY
105	k	K5107	SA MUI	SURATTHANI	THAILAND
106	k	K5110	SA MUI	SURATTHANI	THAILAND
107	k	K5111	SA MUI	SURATTHANI	THAILAND
108	k	K5113	SA MUI	SURATTHANI	THAILAND
109	k	K5115	SA MUI	SURATTHANI	THAILAND
110	j	K5201	HAT YAI	SONGKHLA	THAILAND
111	j	K5205	HAT YAI	SONGKHLA	THAILAND
112	j	K5207	HAT YAI	SONGKHLA	THAILAND
113	j	K5209	HAT YAI	SONGKHLA	THAILAND
114	j	K5210	HAT YAI	SONGKHLA	THAILAND
115	m	CK-74	RA WAI BEACH	PHUKET	THAILAND
116	m	CK-75	RA WAI BEACH	PHUKET	THAILAND
117	m	CK-76	RA WAI BEACH	PHUKET	THAILAND
118	m	CK-77	RA WAI BEACH	PHUKET	THAILAND
119	m	CK-78	RA WAI BEACH	PHUKET	THAILAND
120	p	C-87	LUBOK DARAT	JOHOR	MALAYSIA
121	p	C-89	LUBOK DARAT	JOHOR	MALAYSIA
122	q	C-94	BENUT	JOHOR	MALAYSIA
123	r	C-100	KOTA TINGGI	JOHOR	MALAYSIA
124	s	C-108	KAKUP	JOHOR	MALAYSIA
125	t	C-118	KUALA SELANGOR	SELANGOR	MALAYSIA
126	t	C-119	KUALA SELANGOR	SELANGOR	MALAYSIA
127	u	C-130	SG. BARU	SELANGOR	MALAYSIA
128	u	C-131	SG. BARU	SELANGOR	MALAYSIA
129	u	C-132	SG. BARU	SELANGOR	MALAYSIA

DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=FWLN

FOREWING LENGTH

Moments

N	129	Sum Wgts	129
Mean	7.745207	Sum	999.1317
Std Dev	0.140746	Variance	0.019809
Skewness	-0.50618	Kurtosis	-0.09696
USS	7741.017	CSS	2.535609
CV	1.817202	Std Mean	0.012392
T:Mean=0	625.0169	Prob> T	0.0001
Sgn Rank	4192.5	Prob> S	0.0001
Num ^= 0	129		
W:Normal	0.962169	Prob<W	0.0122

Quantiles(Def=5)

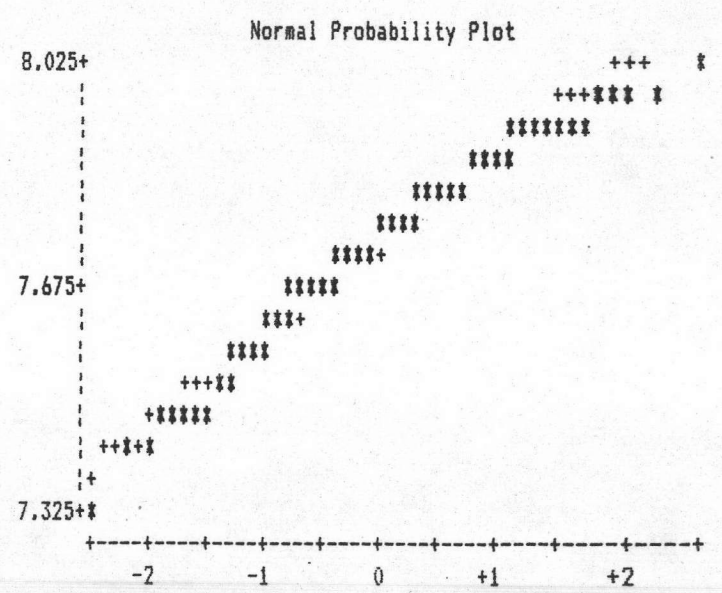
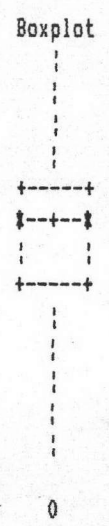
100% Max	8.00808	99%	7.99713
75% Q3	7.84143	95%	7.94564
50% Med	7.75444	90%	7.92721
25% Q1	7.6639	10%	7.5488
0% Min	7.34474	5%	7.46075
		1%	7.40011
Range	0.66334		
Q3-Q1	0.17753		
Mode	7.69049		

Extremes

Lowest ID	Highest ID
7.34474(C-100)	7.95158(K1511)
7.40011(K5001)	7.97458(K1206)
7.42125(C-131)	7.97668(K1005)
7.45203(K5010)	7.99713(K2401)
7.45666(C-132)	8.00808(K3039)

Stem Leaf

Stem Leaf	#
80 **	2
79 *****	5
79 *****	11
78 *****	14
78 *****	18
77 *****	18
77 *****	18
76 *****	17
76 *****	6
75 *****	8
75 ***	3
74 *****	6
74 **	2
73	
73 *	1



Multiply Stem.Leaf by 10\*\*1

DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

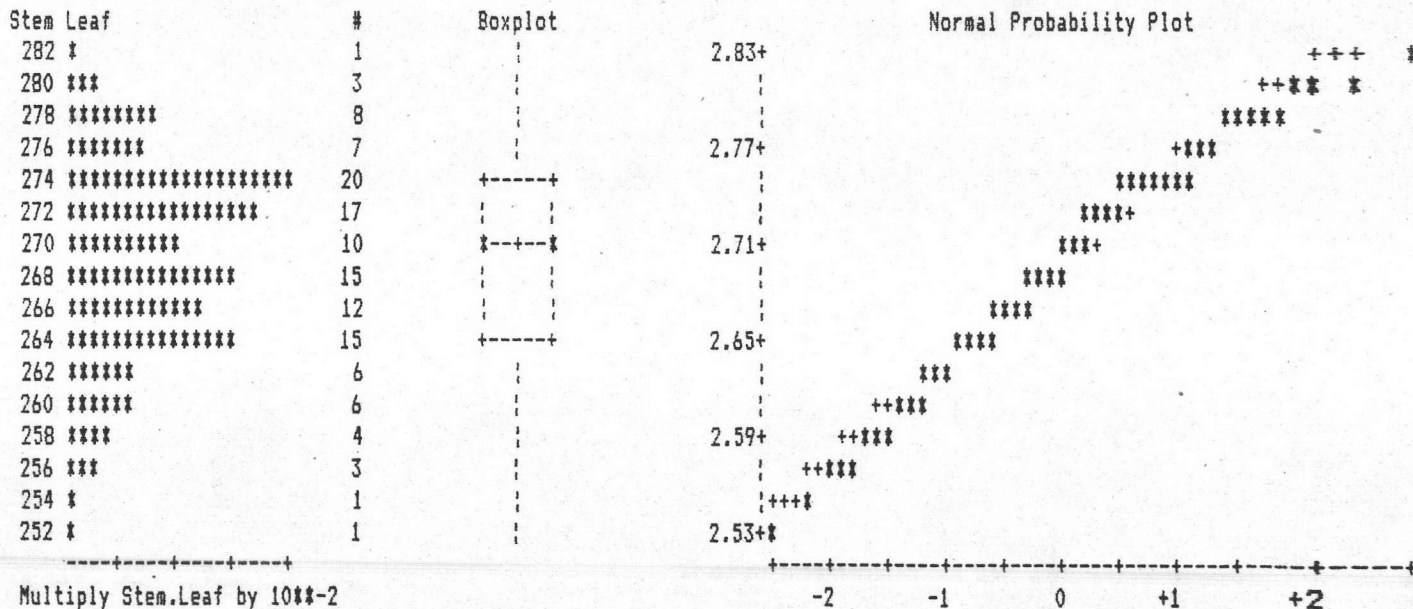
UNIVARIATE PROCEDURE

Variable=FWWD FOREWING WIDTH

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	2.83792	99%	2.81192
Mean	2.699706	Sum	348.262	75% Q3	2.7484	95%	2.78784
Std Dev	0.061593	Variance	0.003794	50% Med	2.70362	90%	2.77937
Skewness	-0.30802	Kurtosis	-0.44525	25% Q1	2.65662	10%	2.61686
USS	940.6906	CSS	0.485593	0% Min	2.53841	5%	2.58946
CV	2.281471	Std Mean	0.005423			1%	2.55202
T:Mean=0	497.8287	Prob> T	0.0001	Range	0.29951		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0.09178		
Num ^= 0	129			Mode	2.53841		
W:Normal	0.972703	Prob<W	0.1390				

Extremes

Lowest	ID	Highest	ID
2.53841	(C-100)	2.79688	(K1001)
2.55202	(C-131)	2.80195	(K1601)
2.57198	(K5207)	2.80225	(K1511)
2.57709	(K5010)	2.81192	(K1604)
2.5792	(C-87)	2.83792	(K3039)



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=HWLN HINDWING LENGTH

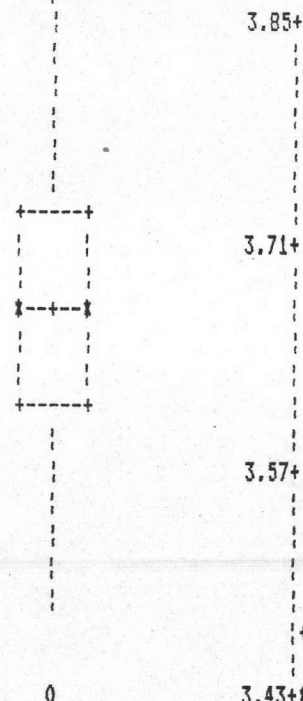
Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	3.84123	99%	3.82475
Mean	3.668096	Sum	473.1844	75% Q3	3.72287	95%	3.78336
Std Dev	0.078608	Variance	0.006179	50% Med	3.67579	90%	3.76846
Skewness	-0.34432	Kurtosis	-0.09571	25% Q1	3.61812	10%	3.56295
USS	1736.477	CS	0.790933	0% Min	3.42745	5%	3.52464
CV	2.14301	Std Mean	0.006921			1%	3.49655
T:Mean=0	529.9938	Prob> T	0.0001	Range	0.41378		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0.10475		
Num ^= 0	129			Mode	3.42745		
W:Normal	0.979666	Prob<W	0.4337				

Extremes

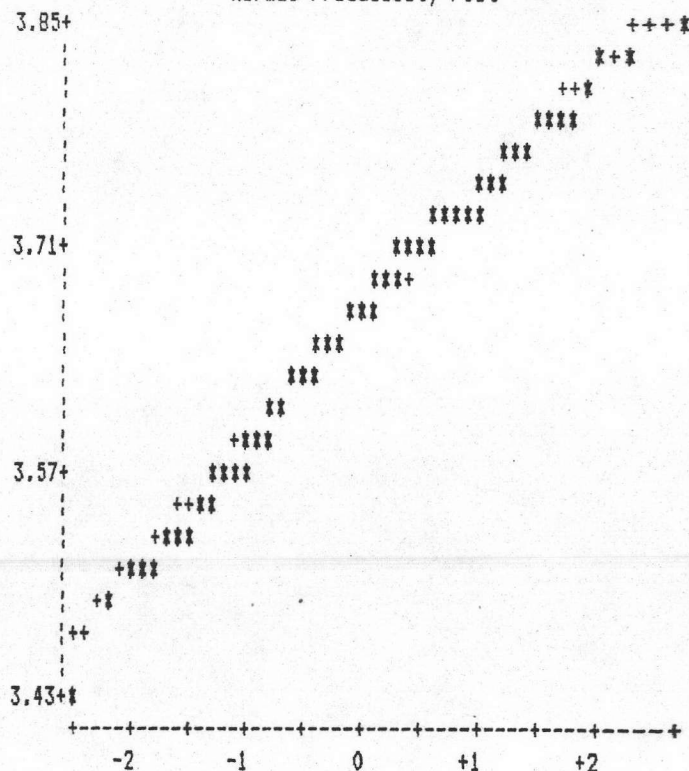
Lowest	ID	Highest	ID
3.42745	(C-100)	3.79745	(K1404)
3.49655	(K5004)	3.80727	(K2401)
3.50944	(C-131)	3.82165	(K1206)
3.50955	(K5205)	3.82475	(K1005)
3.51132	(K5010)	3.84123	(K3039)

Stem Leaf	#
384 *	1
382 **	2
380 *	1
378 *****	5
376 *****	6
374 *****	8
372 *****	11
370 *****	16
368 *****	11
366 *****	12
364 *****	14
362 *****	9
360 *****	6
358 *****	7
356 *****	8
354 ***	3
352 ****	4
350 ***	3
348 *	1
346	
344	
342 *	1

Boxplot



Normal Probability Plot



+ Multiply Stem.Leaf by 10\*\*2







DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=CUBINDEX CUBITAL INDEX

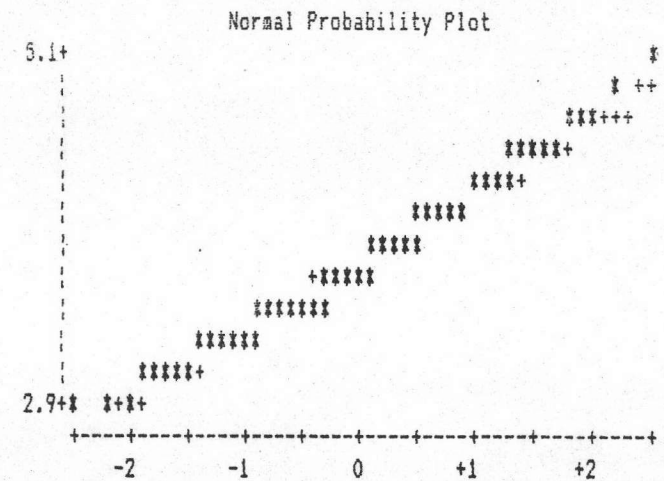
Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	5.059542	99%	4.820377
Mean	3.784506	Sum	488.2013	75% Q3	4.064227	95%	4.508017
Std Dev	0.429375	Variance	0.184363	50% Med	3.723695	90%	4.401585
Skewness	0.426903	Kurtosis	-0.05259	25% Q1	3.470492	10%	3.259979
USS	1871.2	CSS	23.59842	0% Min	2.941453	5%	3.12518
CV	11.34559	Std Mean	0.037804			1%	2.944401
T:Mean=0	100.1077	Prob> T	0.0001	Range	2.118089		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0.593735		
Num ^= 0	129			Mode	2.941453		
W:Normal	0.972149	Prob<W	0.1247				

Extremes

Lowest	ID	Highest	ID
2.941453	(C-89)	4.700465	(K1003)
2.944401	(K4016)	4.764249	(C-100)
2.967641	(K3005)	4.790008	(K5110)
3.016588	(K2201)	4.820377	(K3211)
3.097851	(K1404)	5.059542	(K3001)

Stem	Leaf	#
50	*	1
48	*	1
46	***	3
44	*****	8
42	*****	9
40	*****	19
38	*****	17
36	*****	22
34	*****	26
32	*****	15
30	****	5
28	***	3

Multiply Stem.Leaf by 10\*\*1



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=FWINDEX FOREWING INDEX

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	2.937191	99%	2.934427
Mean	2.869754	Sum	370.1983	75% Q3	2.892216	95%	2.9168
Std Dev	0.030286	Variance	0.000917	50% Med	2.871598	90%	2.906029
Skewness	-0.25074	Kurtosis	0.013173	25% Q1	2.851165	10%	2.834852
USS	1062.496	CSS	0.117407	0% Min	2.792586	5%	2.814354
CV	1.055352	Std Mean	0.002667			1%	2.794013
T:Mean=0	1076.211	Prob> T	0.0001	Range	0.144604		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0.041051		
Num ^= 0	129			Mode	2.792586		
W:Normal	0.97419	Prob<W	0.1838				

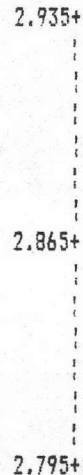
Extremes

Lowest	ID	Highest	ID
2.792586	(K1604)	2.926856	(CK-78)
2.794013	(K3001)	2.927436	(K4106)
2.80162	(K1605)	2.933834	(K1506)
2.801894	(K3101)	2.934427	(K1205)
2.802147	(K1103)	2.937191	(K1008)

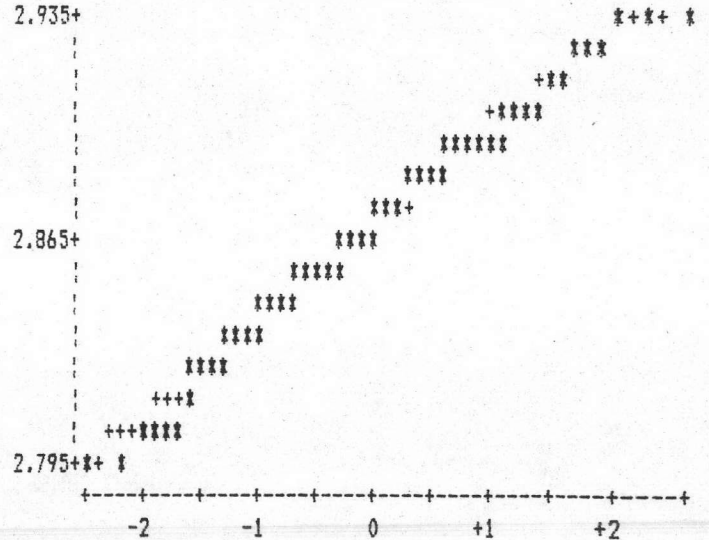
Stem Leaf	#
293 ***	3
292 ***	3
291 ***	3
290 *****	10
289 *****	19
288 *****	15
287 *****	14
286 *****	16
285 *****	17
284 *****	10
283 *****	7
282 *****	5
281 *	1
280 ****	4
279 **	2

Multiply Stem.Leaf by 10\*\* -2

Boxplot



Normal Probability Plot



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=HWINDEX HINDWING INDEX

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	2.566367	99%	2.525489
Mean	2.435002	Sum	314.1153	75% Q3	2.474945	95%	2.511943
Std Dev	0.050549	Variance	0.002555	50% Med	2.436749	90%	2.499529
Skewness	-0.10264	Kurtosis	-0.55503	25% Q1	2.398763	10%	2.367241
USS	765.1985	CSS	0.327068	0% Min	2.317478	5%	2.353248
CV	2.075938	Std Mean	0.004451	Range	0.248889	1%	2.322971
T:Mean=0	547.1173	Prob> T	0.0001	Q3-Q1	0.076182		
Sgn Rank	4192.5	Prob> S	0.0001	Mode	2.317478		
Num ^= 0	129						
W:Normal	0.977885	Prob<W	0.3385				

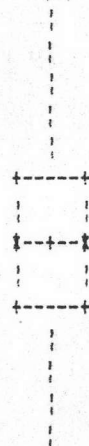
Extremes

Lowest	ID	Highest	ID
2.317478	(K3041)	2.521551	(K2005)
2.322971	(K3023)	2.52478	(K1008)
2.332069	(K3019)	2.524783	(CK-75)
2.336805	(K3034)	2.525489	(K1203)
2.341354	(K3039)	2.566367	(K5113)

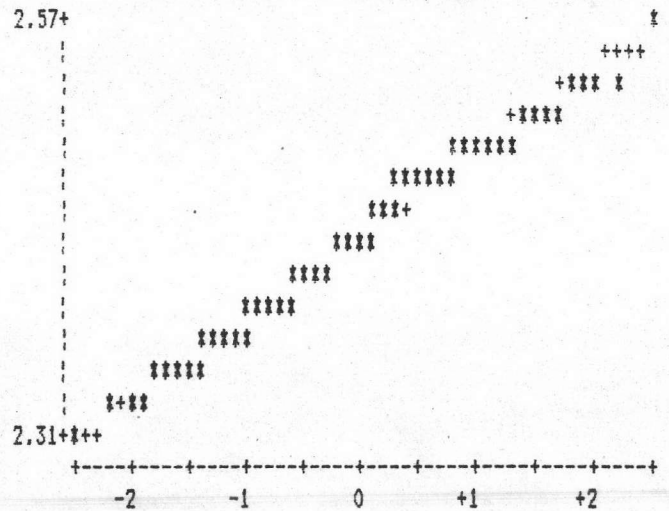
Stem Leaf	#
256 *	1
254	
252 ****	4
250 ****	8
248 ****	15
246 ****	20
244 ****	12
242 ****	17
240 ****	18
238 ****	14
236 ****	10
234 ****	6
232 ***	3
230 *	1

Multiply Stem.Leaf by 10\*\*-2

Boxplot



Normal Probability Plot



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=HAMU HAMULI COUNT

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	19.1	99%	19
Mean	17.47519	Sum	2254.3	75% Q3	18.2	95%	18.7
Std Dev	0.821492	Variance	0.674849	50% Med	17.5	90%	18.4
Skewness	-0.20059	Kurtosis	-0.63707	25% Q1	17	10%	16.2
USS	39480.71	CSS	86.38062	0% Min	15.5	5%	16
CV	4.700902	Std Mean	0.072328			1%	15.8
T:Mean=0	241.6093	Prob> T	0.0001	Range	3.6		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	1.2		
Num ^= 0	129			Mode	18.3		
W:Normal	0.962362	Prob<W	0.0129				

Extremes

Lowest	ID	Highest	ID
15.5	(C-131)	18.9	(K2001)
15.8	(C-132)	18.9	(K3039)
15.9	(CK-75)	19	(K2012)
15.9	(C-130)	19	(K2101)
15.9	(C-100)	19.1	(K3040)

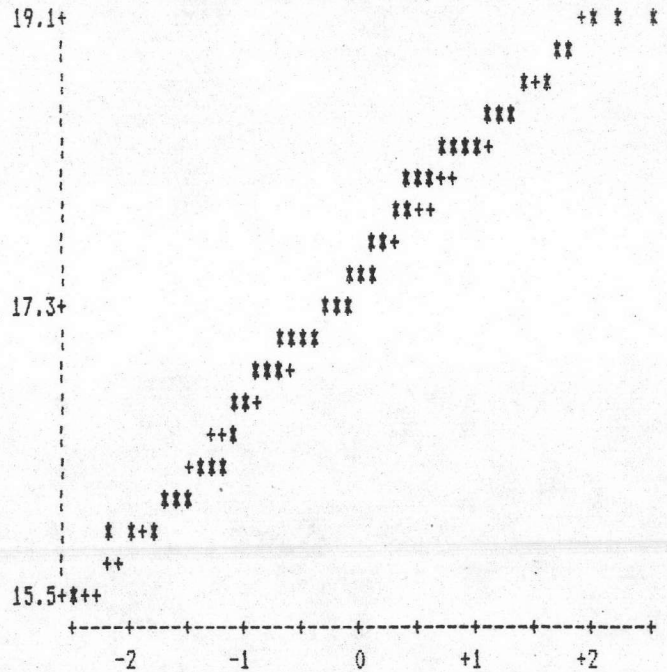
Stem Leaf	#
190 ***	3
188 ***	3
186 *****	5
184 *****	7
182 *****	15
180 *****	10
178 *****	9
176 *****	7
174 *****	11
172 *****	12
170 *****	15
168 *****	10
166 ****	4
164 **	2
162 *****	7
160 ****	4
158 ****	4
156	
154 *	1

Multiply Stem.Leaf by 10\*\*1

Boxplot



Normal Probability Plot



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=AN29 ANGLE 29

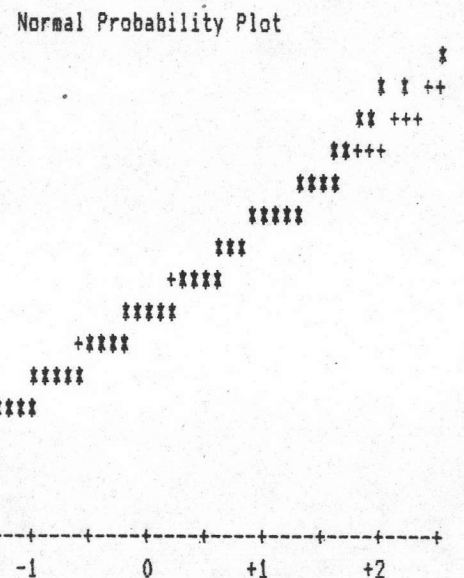
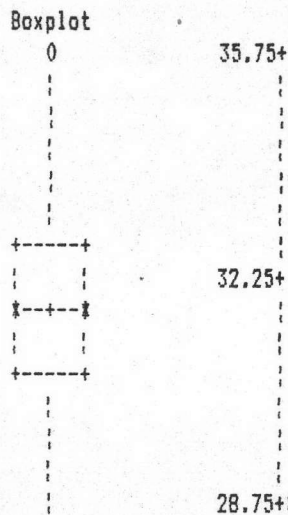
Moments			
N	129	Sum Wgts	129
Mean	31.80354	Sum	4102.657
Std Dev	1.334087	Variance	1.779788
Skewness	0.460949	Kurtosis	0.032299
USS	130706.8	CSS	227.8129
CV	4.194775	Std Mean	0.11746
T:Mean=0	270.7611	Prob> T	0.0001
Sgn Rank	4192.5	Prob> S	0.0001
Num ^= 0	129		
W:Normal	0.973986	Prob<W	0.1771

Quantiles(Def=5)			
100% Max	35.74771	99%	35.15654
75% Q3	32.59001	95%	34.14946
50% Med	31.61615	90%	33.57628
25% Q1	30.84897	10%	30.1304
0% Min	28.9444	5%	29.83607
		1%	29.25533
Range	6.80331		
Q3-Q1	1.74104		
Mode	28.9444		

Extremes

Lowest	ID	Highest	ID
28.9444	(K1003)	34.61794	(C-119)
29.25533	(K1203)	34.80912	(K5004)
29.48666	(K3001)	35.14937	(CK-75)
29.68237	(K1205)	35.15654	(C-118)
29.75387	(K1005)	35.74771	(K5210)

Stem Leaf	#
35 *	1
35 **	2
34 **	2
34 ****	4
33 ****	4
33 ****	4
33 ****	12
32 ****	12
32 ****	16
31 ****	22
31 ****	19
30 ****	15
30 ****	12
29 ****	6
29 *	1
28 *	1



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=AN30 ANGLE 30

Moments			
N	129	Sum Wgts	129
Mean	109.0947	Sum	14073.21
Std Dev	2.694416	Variance	7.259878
Skewness	-0.00734	Kurtosis	0.133095
USS	1536241	CSS	929.2644
CV	2.469797	Std Mean	0.23723
T:Mean=0	459.8685	Prob> T	0.0001
Sgn Rank	4192.5	Prob> S	0.0001
Num ^= 0	129		
W:Normal	0.989963	Prob<W	0.9461

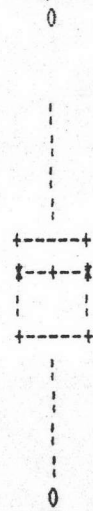
Quantiles(Def=5)			
100% Max	117.5537	99%	114.7972
75% Q3	110.7774	95%	113.2376
50% Med	109.2803	90%	112.7328
25% Q1	107.4809	10%	105.5975
0% Min	102.1484	5%	104.4196
		1%	103.4359
Range	15.40534		
Q3-Q1	3.29651		
Mode	102.1484		

Extremes

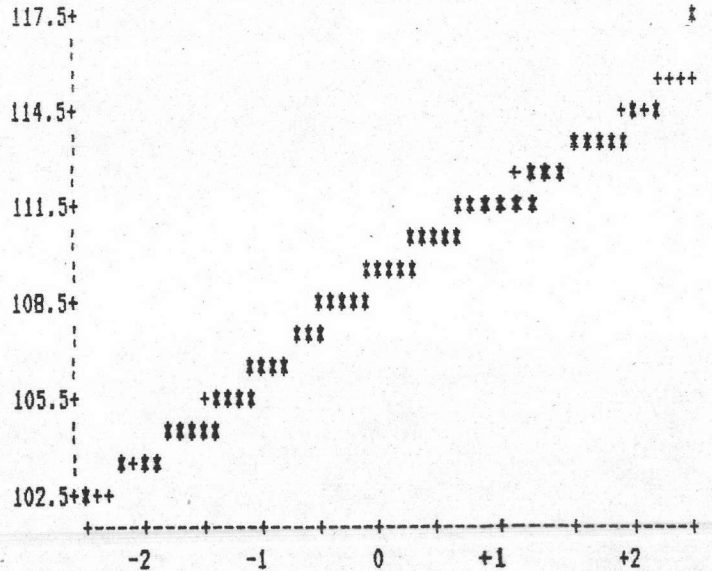
Lowest	ID	Highest	ID
102.1484	(K5111)	113.7966	(K1103)
103.4359	(K4103)	113.9261	(K1206)
103.4488	(K5004)	114.7228	(K4206)
103.8235	(K5201)	114.7972	(K3211)
104.2	(C-87)	117.5537	(K3001)

Stem Leaf	#
117 *	1
116 .	
115	
114 **	2
113 *****	7
112 *****	5
111 *****	16
110 *****	19
109 *****	20
108 *****	20
107 *****	10
106 *****	12
105 *****	7
104 *****	6
103 ***	3
102 *	1

Boxplot



Normal Probability Plot



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=AN31 ANGLE 31

Moments			
N	129	Sum Wgts	129
Mean	95.64643	Sum	12338.39
Std Dev	1.551672	Variance	2.407686
Skewness	0.187555	Kurtosis	0.2264
USS	1180431	CSS	308.1838
CV	1.6223	Std Mean	0.136617
T:Mean=0	700.1058	Prob> T	0.0001
Sgn Rank	4192.5	Prob> S	0.0001
Num ^= 0	129		
W:Normal	0.983092	Prob<W	0.6372

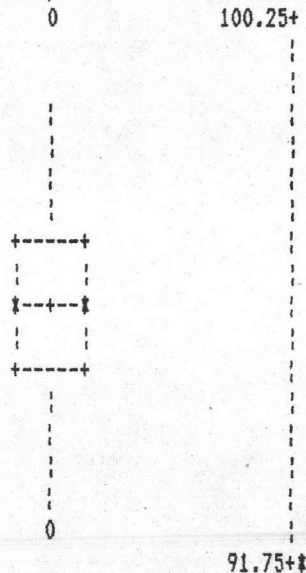
Quantiles(Def=5)			
100% Max	100.2084	99%	100.1336
75% Q3	96.61003	95%	98.03008
50% Med	95.62037	90%	97.66848
25% Q1	94.79467	10%	93.45134
0% Min	91.95129	5%	93.05145
		1%	92.60989
Range	8.25714		
Q3-Q1	1.81536		
Mode	91.95129		

Extremes

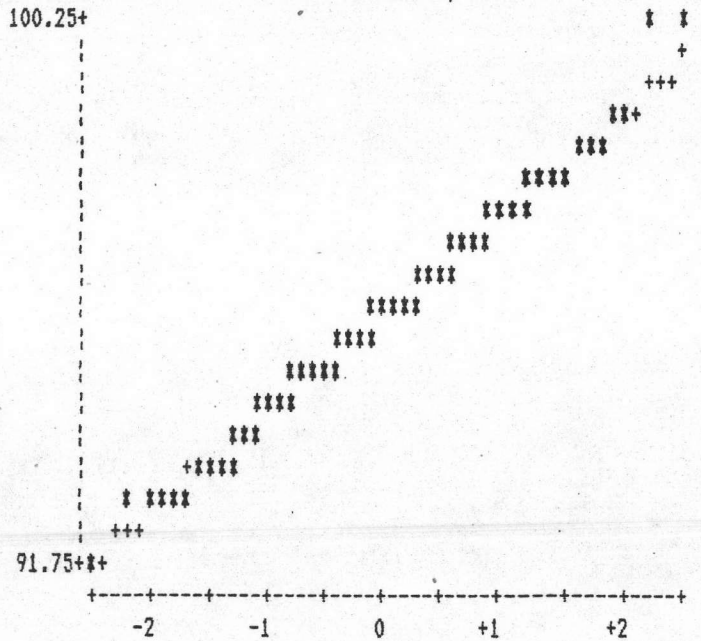
Lowest ID	Highest ID
91.95129(K4004)	98.46064(K5001)
92.60989(K4016)	98.647(CK-78)
92.61078(K1003)	98.93413(K5010)
92.66011(K4002)	100.1336(CK-74)
92.87594(K4012)	100.2084(CK-75)

Stem Leaf	#
100 **	2
99	
99	
98 ***	3
98 ****	4
97 *****	7
97 *****	8
96 *****	10
96 *****	18
95 *****	19
95 *****	16
94 *****	16
94 *****	9
93 *****	5
93 *****	6
92 *****	5
92 *	1
91	

Boxplot



Normal Probability Plot



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

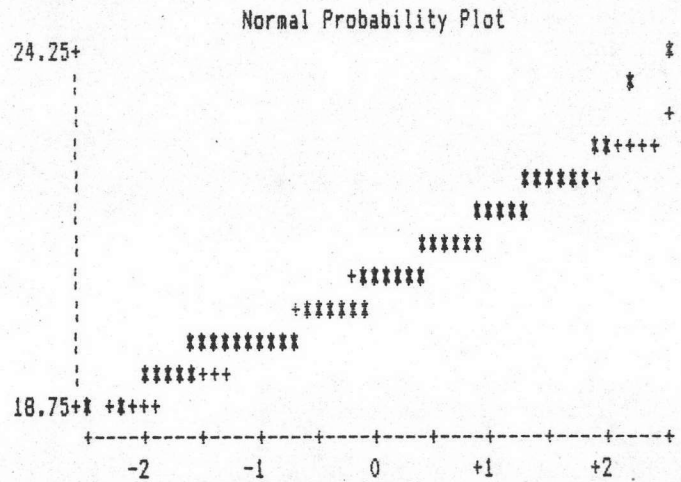
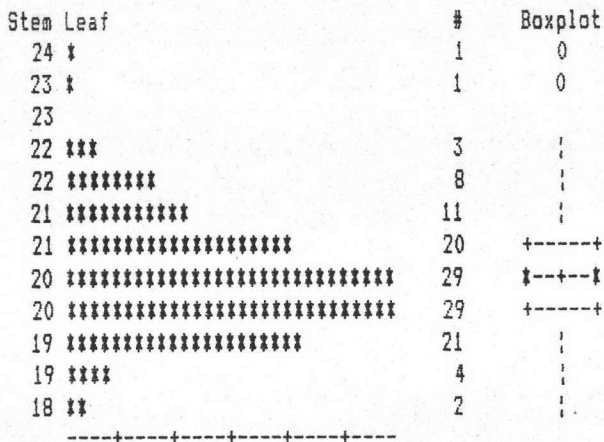
Variable=AN32 ANGLE 32

Moments			
N	129	Sum Wgts	129
Mean	20.69809	Sum	2670.053
Std Dev	0.938718	Variance	0.881191
Skewness	0.787372	Kurtosis	1.37292
USS	55377.79	CS	112.7925
CV	4.535289	Std Mean	0.08265
T:Mean=0	250.4321	Prob> T	0.0001
Sgn Rank	4192.5	Prob> S	0.0001
Num ^= 0	129		
W:Normal	0.964577	Prob<W	0.0227

Quantiles(Def=5)			
100% Max	24.31501	99%	23.6984
75% Q3	21.18276	95%	22.21144
50% Med	20.66098	90%	21.95743
25% Q1	19.99859	10%	19.60257
0% Min	18.70823	5%	19.4735
		1%	18.89495
Range	5.60678		
Q3-Q1	1.18417		
Mode	18.70823		

Extremes

Lowest	ID	Highest	ID
18.70823	(K4105)	22.47145	(K3038)
18.89495	(C-132)	22.62884	(K3037)
19.02561	(K1504)	22.92119	(K1511)
19.06263	(K4106)	23.6984	(K4004)
19.26037	(K1602)	24.31501	(K3001)





DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

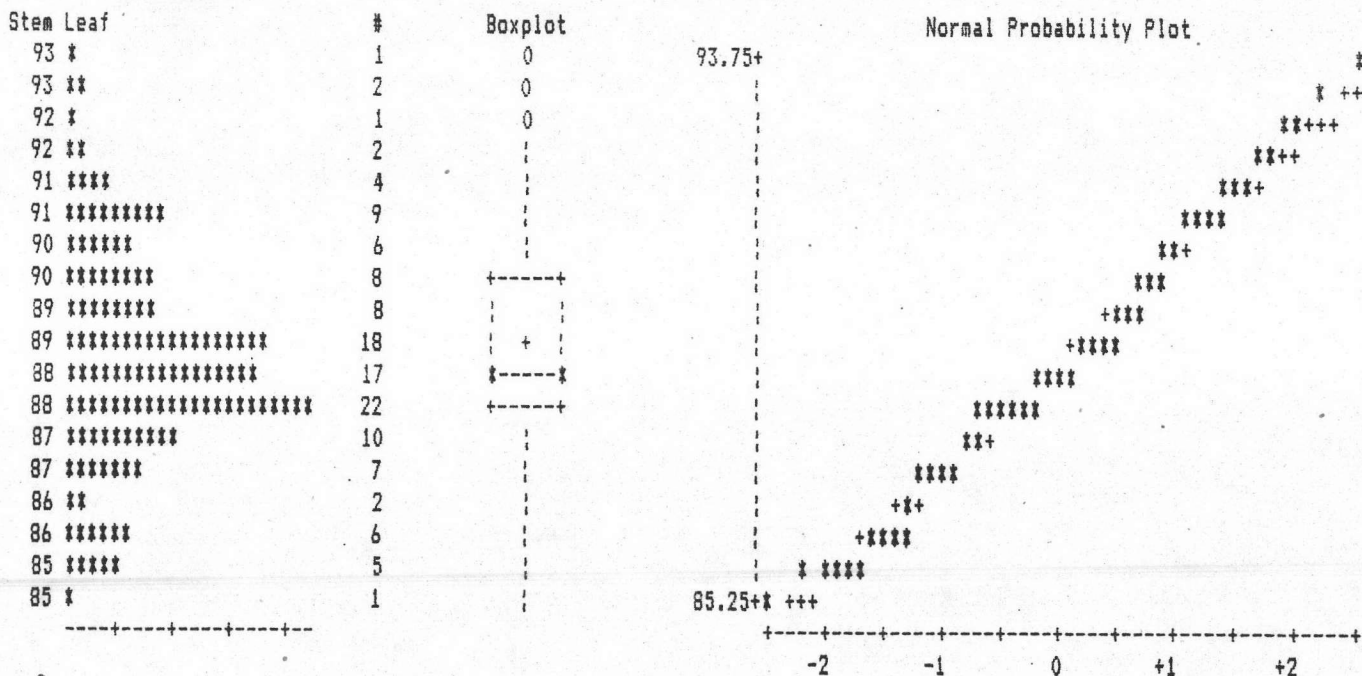
UNIVARIATE PROCEDURE

Variable=AN33 ANGLE 33

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	93.88642	99%	93.11795
Mean	88.95324	Sum	11474.97	75% Q3	89.95995	95%	91.84766
Std Dev	1.708837	Variance	2.920122	50% Med	88.83973	90%	91.34759
Skewness	0.30225	Kurtosis	0.11402	25% Q1	88.06951	10%	86.83008
USS	1021109	CSS	373.7757	0% Min	85.26115	5%	86.07158
CV	1.92105	Std Mean	0.150455			1%	85.54682
T:Mean=0	591.2295	Prob> T	0.0001	Range	8.62527		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	1.89044		
Num ^= 0	129			Mode	85.26115		
W:Normal	0.973925	Prob<W	0.1751				

Extremes

Lowest	ID	Highest	ID
85.26115	(K3001)	92.08722	(K5015)
85.54682	(K1003)	92.89806	(K3103)
85.61501	(K2213)	92.95609	(C-89)
85.81814	(K2216)	93.11795	(K3101)
85.88941	(K3019)	93.88642	(C-119)



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

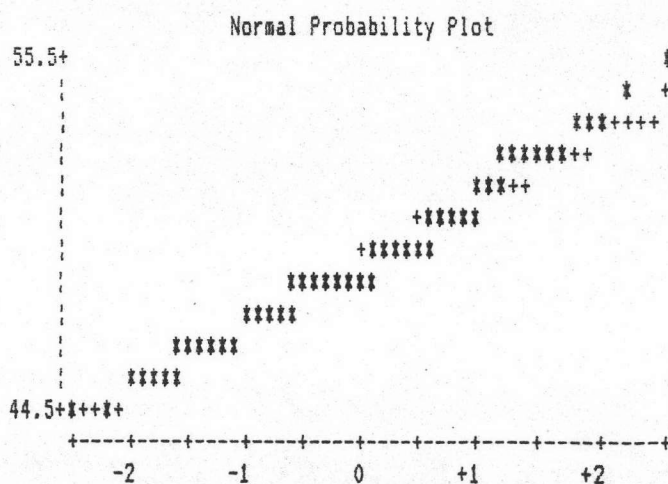
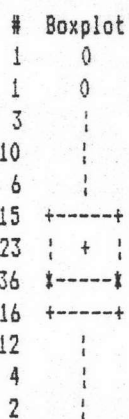
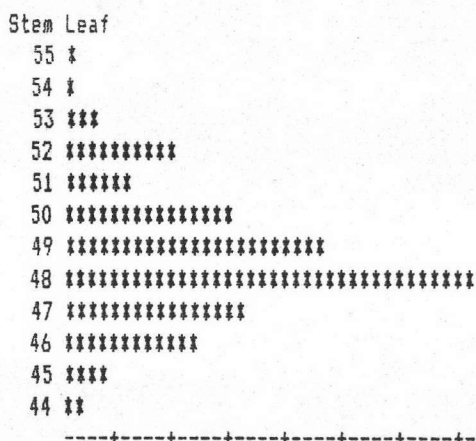
UNIVARIATE PROCEDURE

Variable=AN34 ANGLE 34

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	55.74553	99%	54.25152
Mean	49.09391	Sum	6333.114	75% Q3	50.1426	95%	52.71363
Std Dev	2.022209	Variance	4.089329	50% Med	48.9065	90%	52.19004
Skewness	0.495708	Kurtosis	0.416509	25% Q1	47.89228	10%	46.51002
USS	311440.7	CSS	523.4342	0% Min	44.55735	5%	45.97633
CV	4.119063	Std Mean	0.178046			1%	44.82157
T:Mean=0	275.7379	Prob> T	0.0001	Range	11.18818		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	2.25032		
Num ^= 0	129			Mode	44.55735		
W:Normal	0.974096	Prob<W	0.1807				

Extremes

Lowest	ID	Highest	ID
44.55735	(K1205)	53.24018	(K5004)
44.82157	(K1104)	53.39043	(K2018)
45.45027	(K4108)	53.40014	(K4106)
45.83011	(K3019)	54.25152	(K4105)
45.85879	(K2010)	55.74553	(K4010)





DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

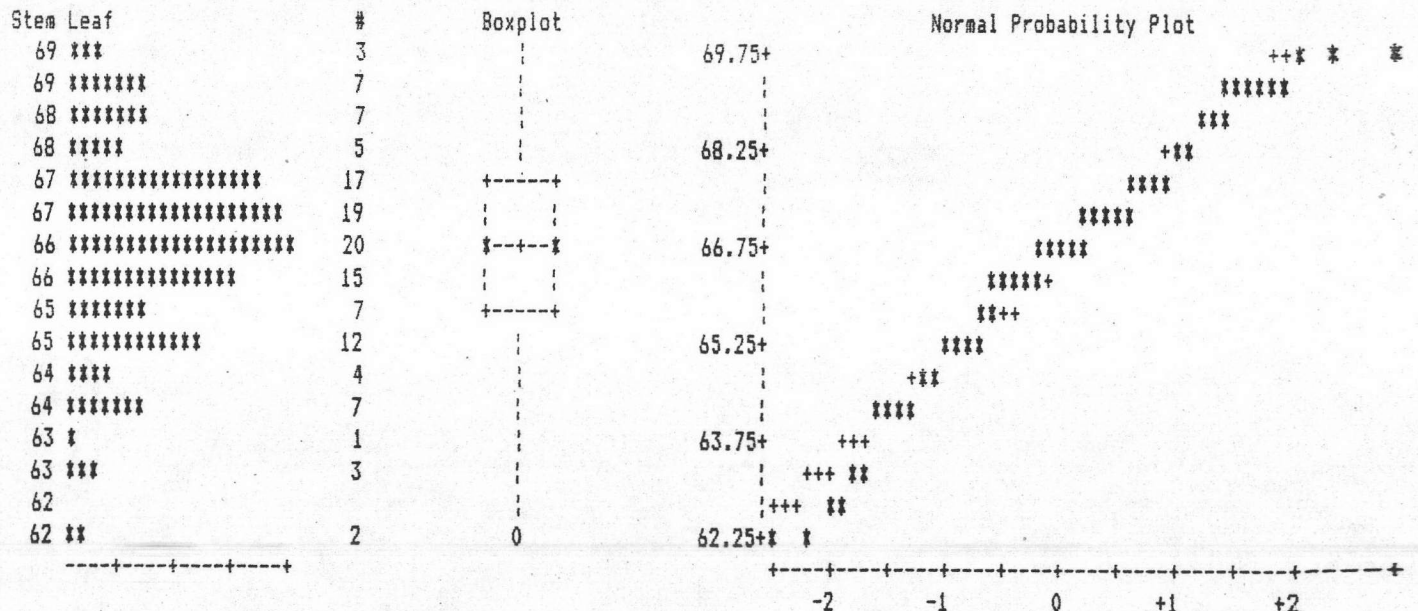
UNIVARIATE PROCEDURE

Variable=AN36 ANGLE 36

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	69.94729	99%	69.81372
Mean	66.64018	Sum	8596.583	75% Q3	67.65423	95%	69.26607
Std Dev	1.609424	Variance	2.590247	50% Med	66.71725	90%	68.76095
Skewness	-0.37914	Kurtosis	0.080076	25% Q1	65.51507	10%	64.4352
USS	573209.3	CSS	331.5516	0% Min	62.15298	5%	64.03278
CV	2.415096	Std Mean	0.141702			1%	62.39745
T:Mean=0	470.2842	Prob> T	0.0001	Range	7.79431		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	2.13916		
Num ^= 0	129			Mode	62.15298		
W:Normal	0.97094	Prob<W	0.0976				

Extremes

Lowest	ID	Highest	ID
62.15298	(C-119)	69.42308	(K2213)
62.39745	(K3101)	69.42746	(K1003)
62.95146	(K2105)	69.58287	(K3001)
62.97193	(K3103)	69.81372	(K5210)
63.00194	(C-89)	69.94729	(K2216)



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=AN38 ANGLE 38

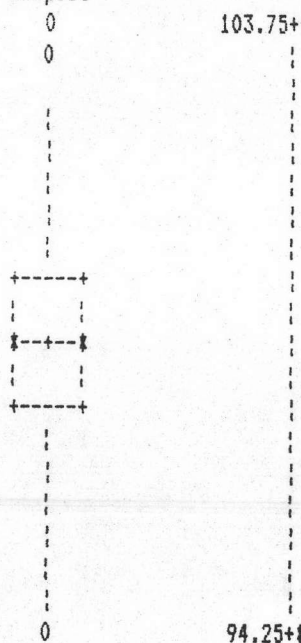
Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	103.7517	99%	103.6528
Mean	98.51915	Sum	12708.97	75% Q3	99.5072	95%	101.899
Std Dev	1.88286	Variance	3.545163	50% Med	98.49406	90%	100.7873
Skewness	0.191353	Kurtosis	0.170817	25% Q1	97.46156	10%	95.77215
USS	1252531	CSS	453.7808	0% Min	94.2876	5%	95.46246
CV	1.911162	Std Mean	0.165777			1%	94.50219
T:Mean=0	594.2886	Prob> T	0.0001	Range	9.4641		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	2.04564		
Num ^= 0	129			Mode	94.2876		
W:Normal	0.977272	Prob<W	0.3086				

Extremes

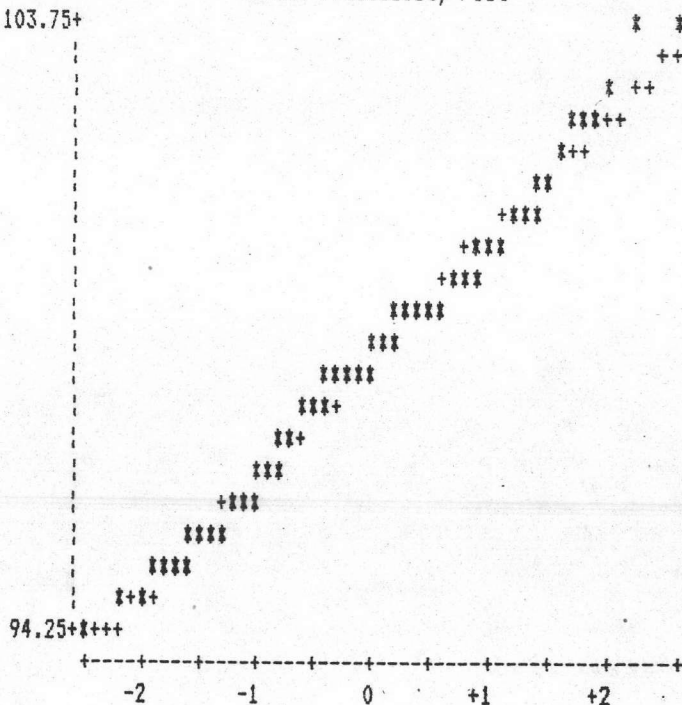
Lowest	ID	Highest	ID
94.2876	(K2008)	102.3576	(K3023)
94.50219	(K4203)	102.3852	(K1504)
94.63306	(K3040)	102.9631	(K1206)
95.28296	(C-108)	103.6528	(K1502)
95.32414	(K1511)	103.7517	(K1205)

Stem Leaf	#
103 **	2
103 *	1
102	
102 ***	3
101 ***	3
101 **	2
100 ****	7
100 ****	8
99 ****	10
99 ****	18
98 ****	14
98 ****	15
97 ****	14
97 ****	4
96 ****	8
96 ****	7
95 ****	7
95 ***	3
94 **	2
94 *	1

Boxplot



Normal Probability Plot



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=AN39 ANGLE 39

Moments			
N	129	Sum Wgts	129
Mean	36.9382	Sum	4765.027
Std Dev	1.418932	Variance	2.013368
Skewness	0.279932	Kurtosis	-0.19263
USS	176269.2	CSS	257.7111
CV	3.841368	Std Mean	0.12493
T:Mean=0	295.6712	Prob> T	0.0001
Sgn Rank	4192.5	Prob> S	0.0001
Num ^= 0	129		
W:Normal	0.975517	Prob<W	0.2322

Quantiles(Def=5)			
100% Max	40.92824	99%	40.50999
75% Q3	37.97154	95%	39.5212
50% Med	36.96751	90%	38.82103
25% Q1	35.88295	10%	34.93611
0% Min	34.01956	5%	34.75078
		1%	34.38051
Range	6.90868		
Q3-Q1	2.08859		
Mode	34.01956		

Extremes

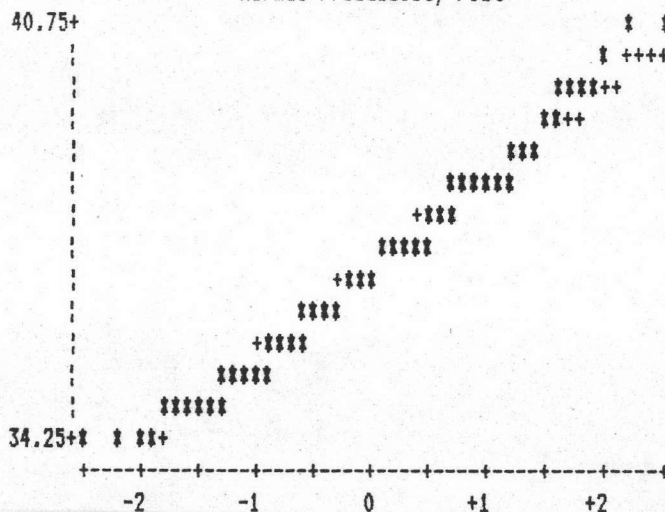
Lowest	ID	Highest	ID
34.01956	(K2026)	39.58182	(K3019)
34.38051	(K1007)	39.74663	(K5207)
34.41397	(K3102)	40.36779	(C-87)
34.48776	(K4207)	40.50999	(K5001)
34.60427	(K3101)	40.92824	(K3204)

Stem Leaf	#
40 **	2
40 *	1
39 ****	4
39 ***	3
38 *****	6
38 *****	18
37 *****	10
37 *****	22
36 *****	14
36 *****	15
35 *****	13
35 *****	8
34 *****	10
34 ***	3

Boxplot



Normal Probability Plot



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

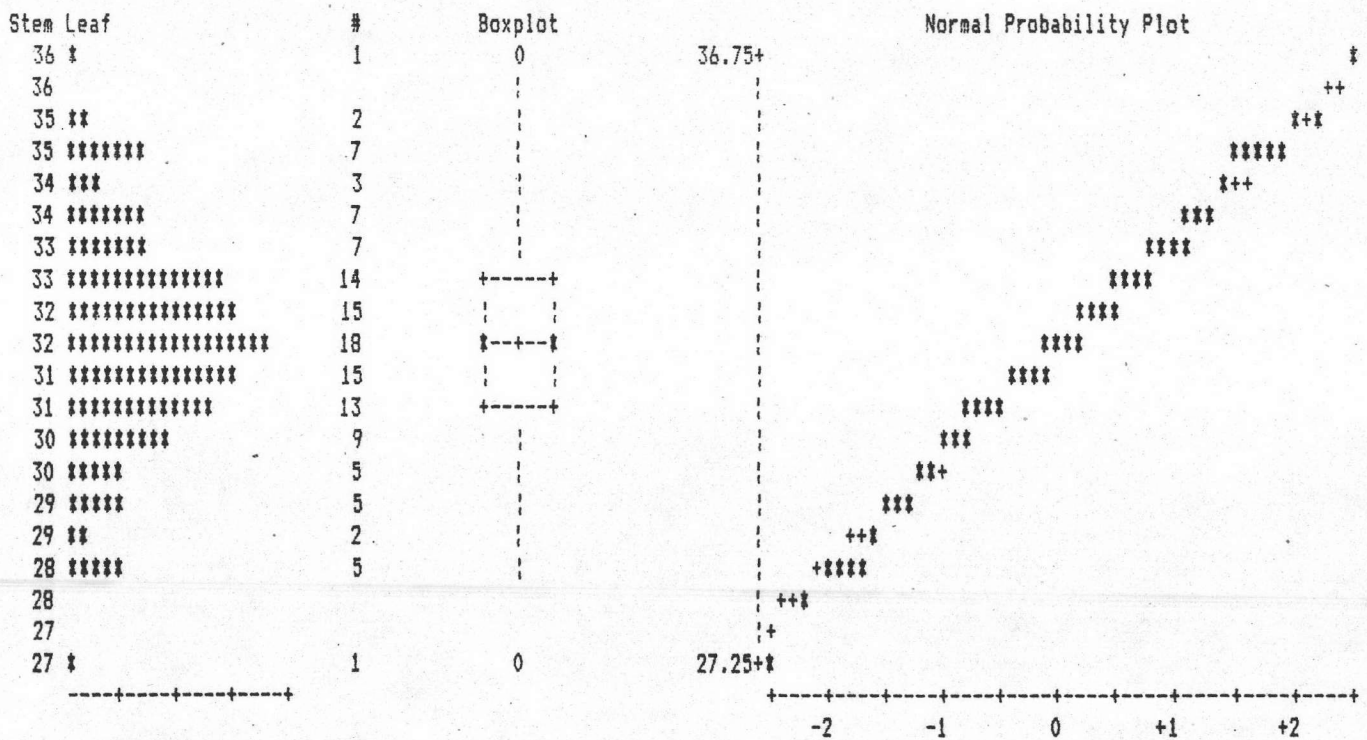
Variable=AN40 ANGLE 40

Moments			
N	129	Sum Wgts	129
Mean	32.21331	Sum	4155.517
Std Dev	1.717784	Variance	2.950781
Skewness	-0.09891	Kurtosis	0.122611
USS	134240.7	CSS	377.7
CV	5.332528	Std Mean	0.151242
T:Mean=0	212.9912	Prob> T	0.0001
Sgn Rank	4192.5	Prob> S	0.0001
Num ^= 0	129		
W:Normal	0.986859	Prob<W	0.8399

Quantiles(Def=5)			
100% Max	36.52397	99%	35.92722
75% Q3	33.34271	95%	35.18705
50% Med	32.21239	90%	34.49255
25% Q1	31.26096	10%	29.91143
0% Min	27.238	5%	29.21733
		1%	28.47705
Range	9.28597		
Q3-Q1	2.08175		
Mode	27.238		

Extremes

Lowest	ID	Highest	ID
27.238	(C-108)	35.425	(K3010)
28.47705	(K1511)	35.44519	(C-87)
28.50018	(K4202)	35.52489	(K1404)
28.64794	(C-130)	35.92722	(K5111)
28.80706	(K3003)	36.52397	(K5115)





DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

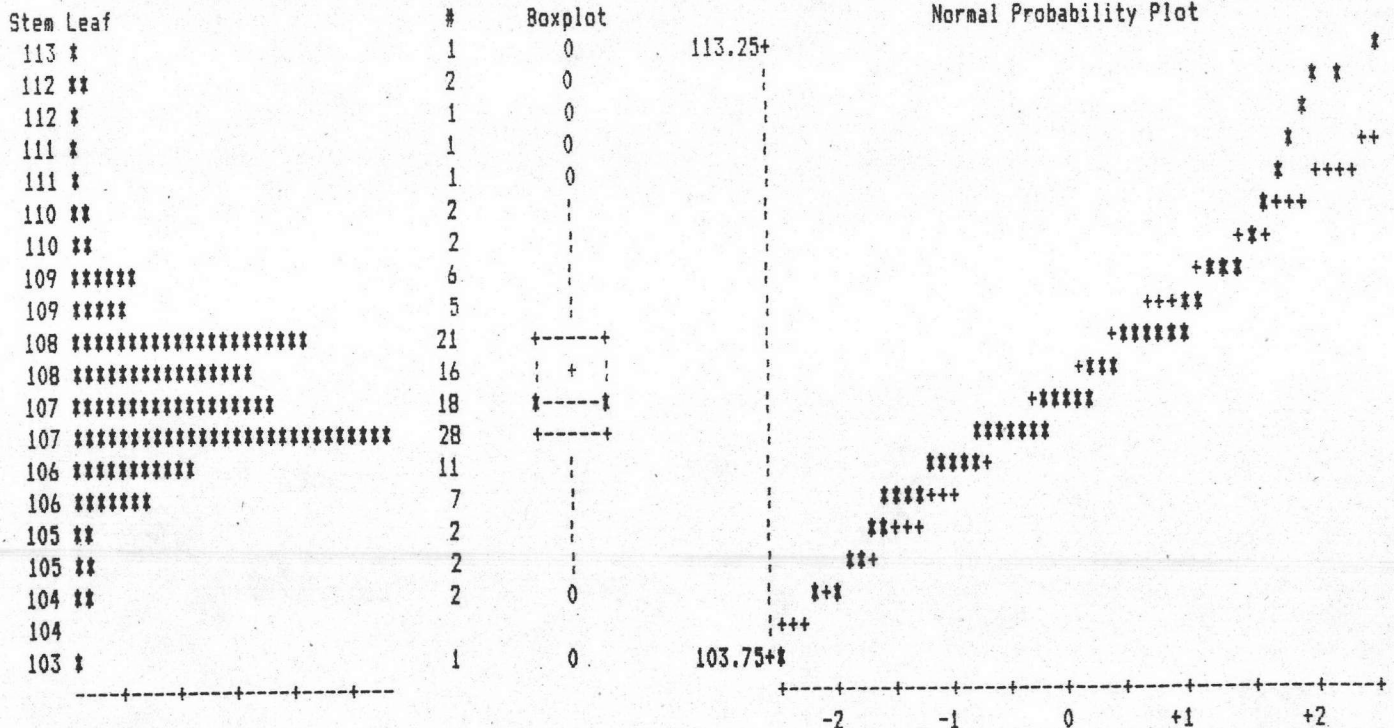
UNIVARIATE PROCEDURE

Variable=AN42 ANGLE 42

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	113.253	99%	112.8209
Mean	107.9689	Sum	13927.99	75% Q3	108.6591	95%	110.8275
Std Dev	1.528021	Variance	2.334848	50% Med	107.82	90%	109.8536
Skewness	0.852094	Kurtosis	2.231802	25% Q1	107.0732	10%	106.3526
USS	1504089	CSS	298.8606	0% Min	103.9025	5%	105.9415
CV	1.415242	Std Mean	0.134535	Range	9.3505	1%	104.5155
T:Mean=0	802.5355	Prob> T	0.0001	Q3-Q1	1.5859		
Sgn Rank	4192.5	Prob> S	0.0001	Mode	103.9025		
Num ^= 0	129						
W:Normal	0.940891	Prob<W	0.0001				

Extremes

Lowest ID	Highest ID
103.9025(K3103)	111.5601(K5110)
104.5155(K2018)	112.4058(K5115)
104.7701(K2021)	112.7506(K5111)
105.0832(K3101)	112.8209(K5113)
105.3999(K3108)	113.253(K5107)





DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=AN43 ANGLE 43

Moments			
N	129	Sum Wgts	129
Mean	75.86914	Sum	9787.119
Std Dev	1.571514	Variance	2.469656
Skewness	-0.50842	Kurtosis	0.109863
USS	742856.4	CSS	316.116
CV	2.071348	Std Mean	0.138364
T:Mean=0	548.3297	Prob> T	0.0001
Sgn Rank	4192.5	Prob> S	0.0001
Num ^= 0	129		
W:Normal	0.968422	Prob<W	0.0566

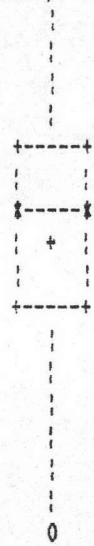
Quantiles(Def=5)			
100% Max	79.02726	99%	78.94544
75% Q3	77.07254	95%	78.07428
50% Med	75.95823	90%	77.8438
25% Q1	74.89274	10%	73.70636
0% Min	71.18533	5%	72.68687
		1%	71.75647
Range	7.84193		
Q3-Q1	2.1798		
Mode	71.18533		

Extremes

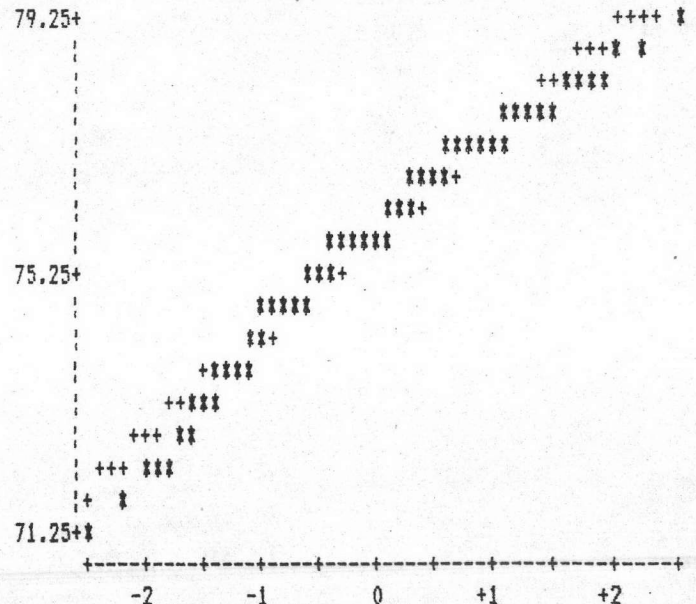
Lowest	ID	Highest	ID
71.18533	(K2216)	78.12876	(C-89)
71.75647	(CK-74)	78.32796	(K4107)
72.28423	(K5111)	78.93504	(K2025)
72.34409	(K5110)	78.94544	(K1104)
72.47394	(K5001)	79.02726	(K2107)

Stem Leaf	#
79 *	1
78 **	2
78 ****	8
77 ****	10
77 ****	13
76 ****	15
76 ****	16
75 ****	19
75 ****	12
74 ****	12
74 ****	4
73 ****	8
73 **	2
72 ***	3
72 **	2
71 *	1
71 *	1

Boxplot



Normal Probability Plot



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

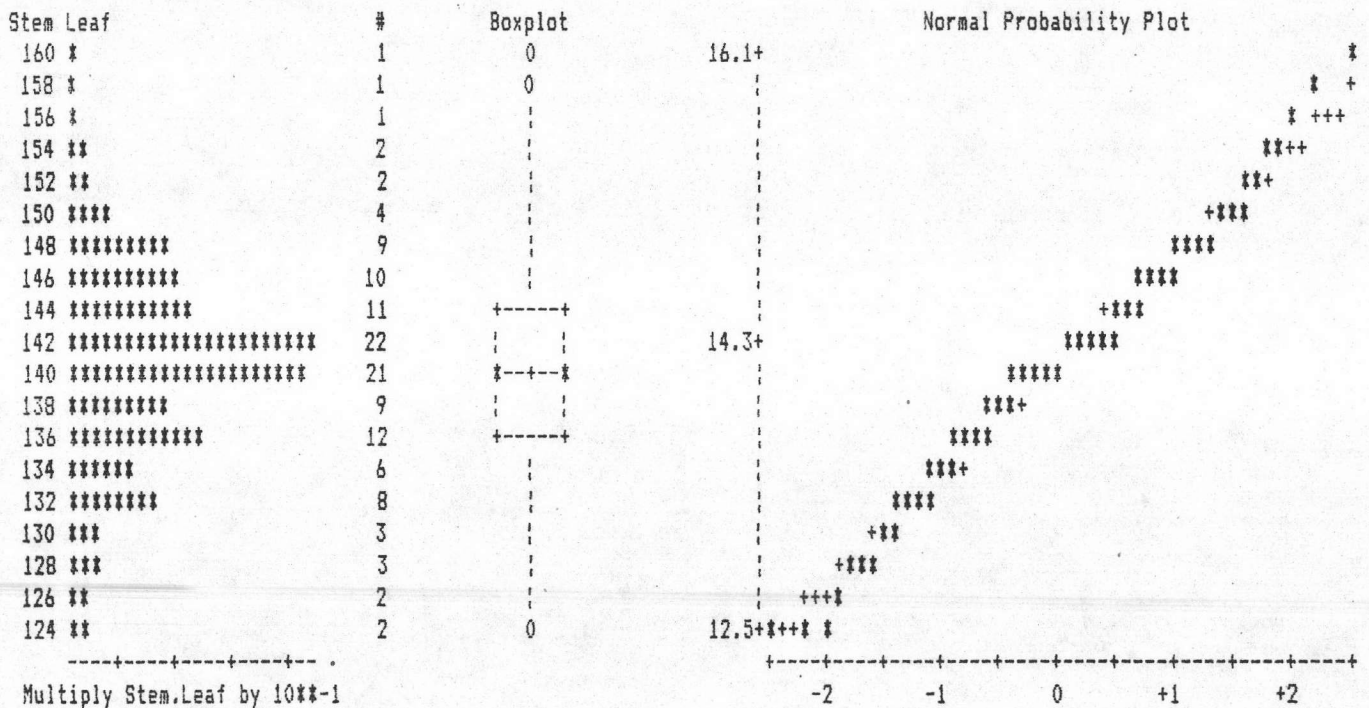
UNIVARIATE PROCEDURE

Variable=AN20 ANGLE 20

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	16.16292	99%	15.83996
Mean	14.13929	Sum	1823.969	75% Q3	14.51645	95%	15.20117
Std Dev	0.675219	Variance	0.455921	50% Med	14.16958	90%	14.9467
Skewness	-0.01805	Kurtosis	0.503961	25% Q1	13.73698	10%	13.21587
USS	25847.98	CSS	58.35785	0% Min	12.42649	5%	12.93667
CV	4.77548	Std Mean	0.05945			1%	12.42736
T:Mean=0	237.8361	Prob> T	0.0001	Range	3.73643		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0.77947		
Num ^= 0	129			Mode	12.42649		
W:Normal	0.983943	Prob<W	0.6874				

Extremes

Lowest	ID	Highest	ID
12.42649	(K4105)	15.41573	(C-89)
12.42736	(K4106)	15.54382	(K5209)
12.59761	(K1102)	15.67326	(K3211)
12.73434	(K1506)	15.83996	(K3204)
12.8362	(K1101)	16.16292	(K4010)



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

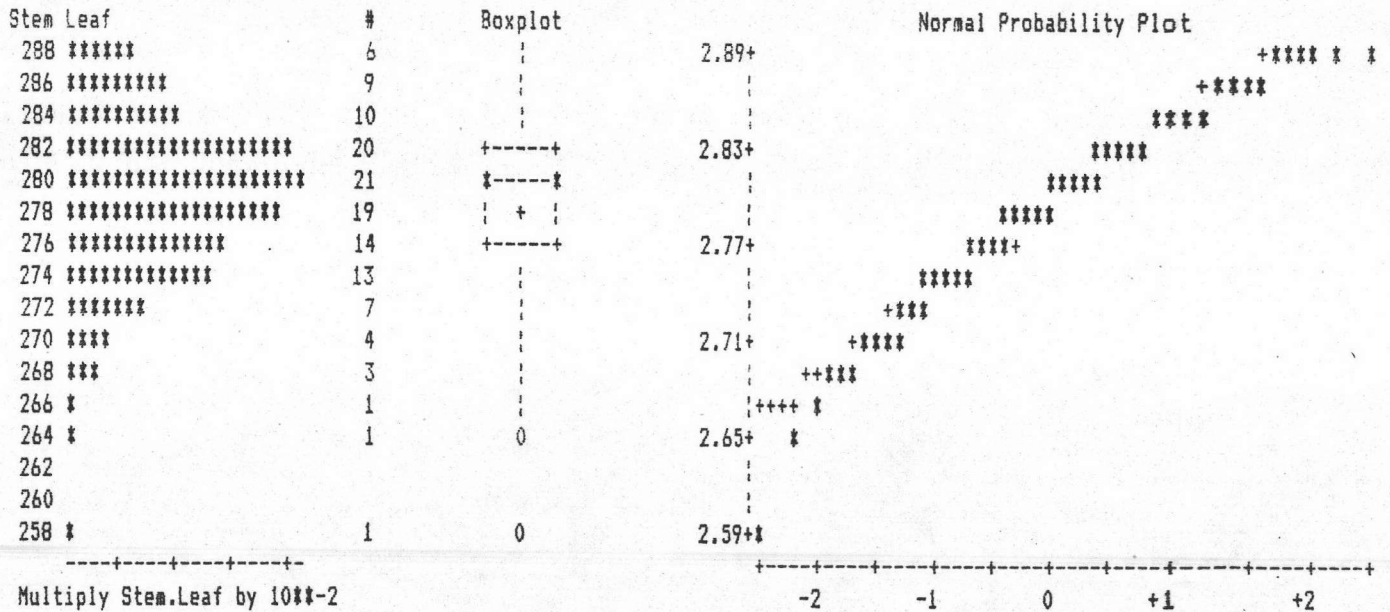
UNIVARIATE PROCEDURE

Variable=TBLN TIBIA LENGTH

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	2.89634	99%	2.89528
Mean	2.795687	Sum	360.6436	75% Q3	2.83105	95%	2.87384
Std Dev	0.053729	Variance	0.002887	50% Med	2.80104	90%	2.86388
Skewness	-0.70585	Kurtosis	1.198148	25% Q1	2.76327	10%	2.72227
USS	1008.616	CSS	0.369513	0% Min	2.58224	5%	2.71009
CV	1.921858	Std Mean	0.004731			1%	2.6548
T:Mean=0	590.9812	Prob> T	0.0001	Range	0.3141		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0.06778		
Num ^= 0	129			Mode	2.58224		
W:Normal	0.969097	Prob<W	0.0658				

Extremes

Lowest	ID	Highest	ID
2.58224	(K3001)	2.88224	(K2014)
2.6548	(K5113)	2.88491	(K2301)
2.66734	(K5015)	2.88696	(K1005)
2.68011	(K5207)	2.89528	(K3039)
2.69208	(C-131)	2.89634	(K3037)



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=FELN FEMUR LENGTH

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	2.29513	99%	2.28021
Mean	2.205918	Sum	284.5635	75% Q3	2.23523	95%	2.26781
Std Dev	0.041665	Variance	0.001736	50% Med	2.21167	90%	2.25773
Skewness	-0.53715	Kurtosis	0.152931	25% Q1	2.17926	10%	2.14709
USS	627.946	CSS	0.222206	0% Min	2.07935	5%	2.13517
CV	1.888789	Std Mean	0.003668	Range	0.21578	1%	2.1036
T:Mean=0	601.328	Prob> T	0.0001	Q3-Q1	0.05597		
Sgn Rank	4192.5	Prob> S	0.0001	Mode	2.07935		
Num ^= 0	129						
W:Normal	0.97016	Prob<W	0.0828				

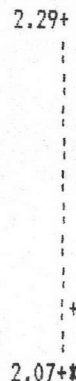
Extremes

Lowest	ID	Highest	ID
2.07935	(K3001)	2.27345	(K3039)
2.1036	(K5113)	2.27357	(K1005)
2.10618	(C-131)	2.27365	(K2001)
2.10688	(K5015)	2.28021	(K2401)
2.11039	(C-100)	2.29513	(K2014)

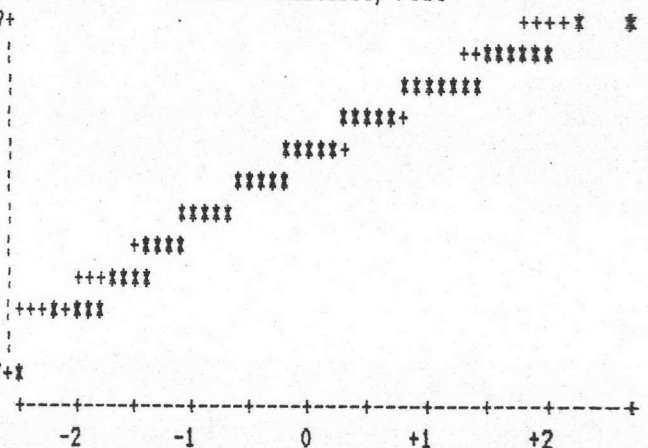
Stem Leaf	#
228 **	2
226 *****	7
224 *****	21
222 *****	22
220 *****	24
218 *****	20
216 *****	16
214 *****	7
212 *****	5
210 *****	4
208	
206 *	1

Multiply Stem.Leaf by 10\*\*-2

Boxplot



Normal Probability Plot



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=TRLN

BASITARSUS LENGTH

Moments			
N	129	Sum Wgts	129
Mean	1.693189	Sum	218.4214
Std Dev	0.030223	Variance	0.000913
Skewness	-0.17728	Kurtosis	-0.59912
USS	369.9456	CSS	0.11692
CV	1.784979	Std Mean	0.002661
T:Mean=0	636.2996	Prob> T	0.0001
Sgn Rank	4192.5	Prob> S	0.0001
Num ^= 0	129		
W:Normal	0.965321	Prob<W	0.0273

Quantiles(Def=5)			
100% Max	1.75312	99%	1.75206
75% Q3	1.71521	95%	1.74258
50% Med	1.69486	90%	1.73328
25% Q1	1.67304	10%	1.64844
0% Min	1.62667	5%	1.63974
		1%	1.63109
Range	0.12645		
Q3-Q1	0.04217		
Mode	1.71671		

Extremes

Lowest	ID	Highest	ID
1.62667	(K4006)	1.74606	(K1005)
1.63109	(K3001)	1.74762	(K1604)
1.63192	(K3034)	1.74925	(K2001)
1.63525	(K1602)	1.75206	(K3039)
1.63531	(K1201)	1.75312	(K3037)

Stem	Leaf	#
175	**	2
174	*****	6
173	*****	6
172	*****	13
171	*****	13
170	*****	16
169	*****	19
168	*****	9
167	*****	17
166	*****	10
165	****	4
164	*****	8
163	*****	5
162	*	1

-----+-----+-----+  
Multiply Stem.Leaf by 10\*\*<sup>-2</sup>

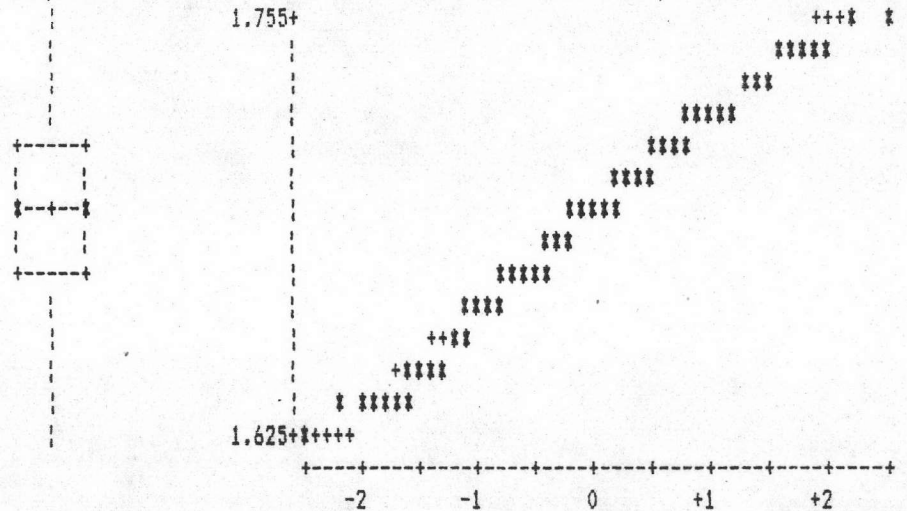
Boxplot

1.755+

1.625+\*++++

Normal Probability Plot

-2 -1 0 +1 +2



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=TRWD BASITARSUS WIDTH

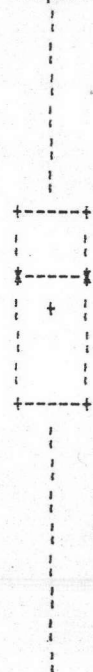
Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	1.00364	99%	1.00337
Mean	0.957643	Sum	123.5359	75% Q3	0.97217	95%	0.99211
Std Dev	0.022266	Variance	0.000513	50% Med	0.96011	90%	0.98584
Skewness	-0.43616	Kurtosis	-0.20603	25% Q1	0.94319	10%	0.92344
USS	118.369	CSS	0.065726	0% Min	0.90114	5%	0.91442
CV	2.366251	Std Mean	0.001995			1%	0.90364
T:Mean=0	479.9921	Prob> T	0.0001	Range	0.1025		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0.02898		
Num ^= 0	129			Mode	0.90114		
W:Normal	0.960794	Prob<W	0.0085				

Extremes

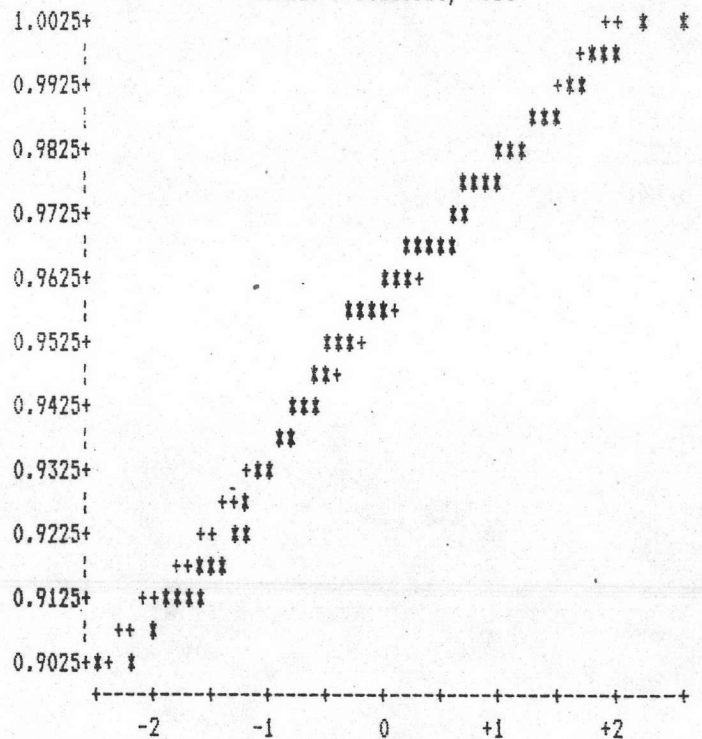
Lowest	ID	Highest	ID
0.90114	(CK-77)	0.99562	(K3216)
0.90364	(CK-74)	0.9958	(K1604)
0.90541	(C-100)	0.99605	(K2010)
0.91007	(K1506)	1.00337	(K2001)
0.9122	(K5015)	1.00364	(K1001)

Stem Leaf	#
100 **	2
99 ***	3
99 ***	3
98 *****	6
98 *****	8
97 *****	8
97 *****	7
96 *****	16
96 *****	13
95 *****	16
95 *****	9
94 ****	4
94 *****	7
93 ****	5
93 *****	6
92 **	2
92 ****	4
91 ***	3
91 ****	4
90 #	1
90 **	2

Boxplot



Normal Probability Plot



Multiply Stem.Leaf by 10\*\* -2



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=TRINDEX BASITARSUS INDEX

Moments			
N	129	Sum Wgts	129
Mean	1.769259	Sum	228.2344
Std Dev	0.032676	Variance	0.001068
Skewness	0.242956	Kurtosis	-0.25977
USS	403.9425	CSS	0.136668
CV	1.846872	Std Mean	0.002877
T:Mean=0	614.9759	Prob> T	0.0001
Sgn Rank	4192.5	Prob> S	0.0001
Num ^= 0	129		
W:Normal	0.971021	Prob<W	0.0993

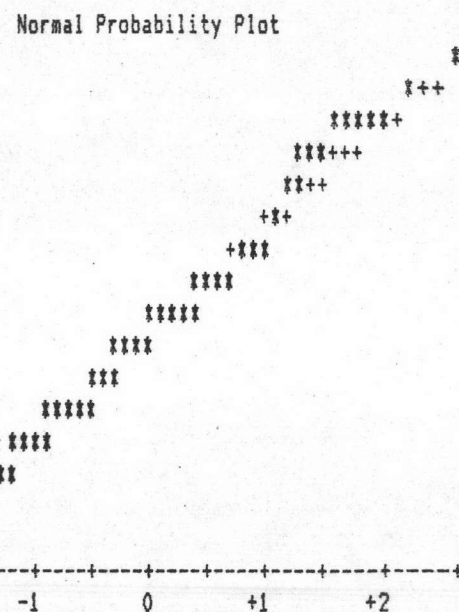
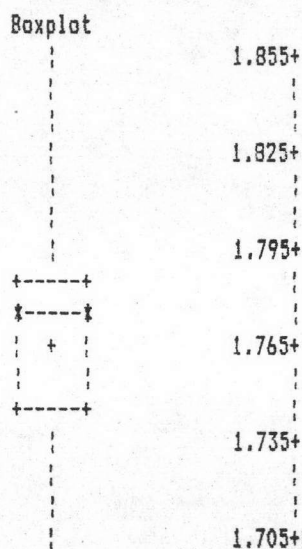
Quantiles(Def=5)			
100% Max	1.852713	99%	1.841362
75% Q3	1.789094	95%	1.833272
50% Med	1.77059	90%	1.818799
25% Q1	1.744592	10%	1.724698
0% Min	1.700406	5%	1.715384
		1%	1.704454
Range	0.152307		
Q3-Q1	0.044502		
Mode	1.700406		

Extremes

Lowest	ID	Highest	ID
1.700406	(K3204)	1.834814	(K1502)
1.704454	(K3105)	1.835551	(CK-76)
1.709165	(K1001)	1.836714	(CK-74)
1.713196	(K4004)	1.841362	(C-87)
1.714034	(K3023)	1.852713	(CK-77)

Stem Leaf	#
185 *	1
184 *	1
183 *****	6
182 ****	4
181 ****	4
180 ***	3
179 *****	12
178 *****	15
177 *****	20
176 *****	13
175 *****	11
174 *****	16
173 *****	8
172 *****	6
171 *****	6
170 ***	3

Multiply Stem.Leaf by 10\*\*2





DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

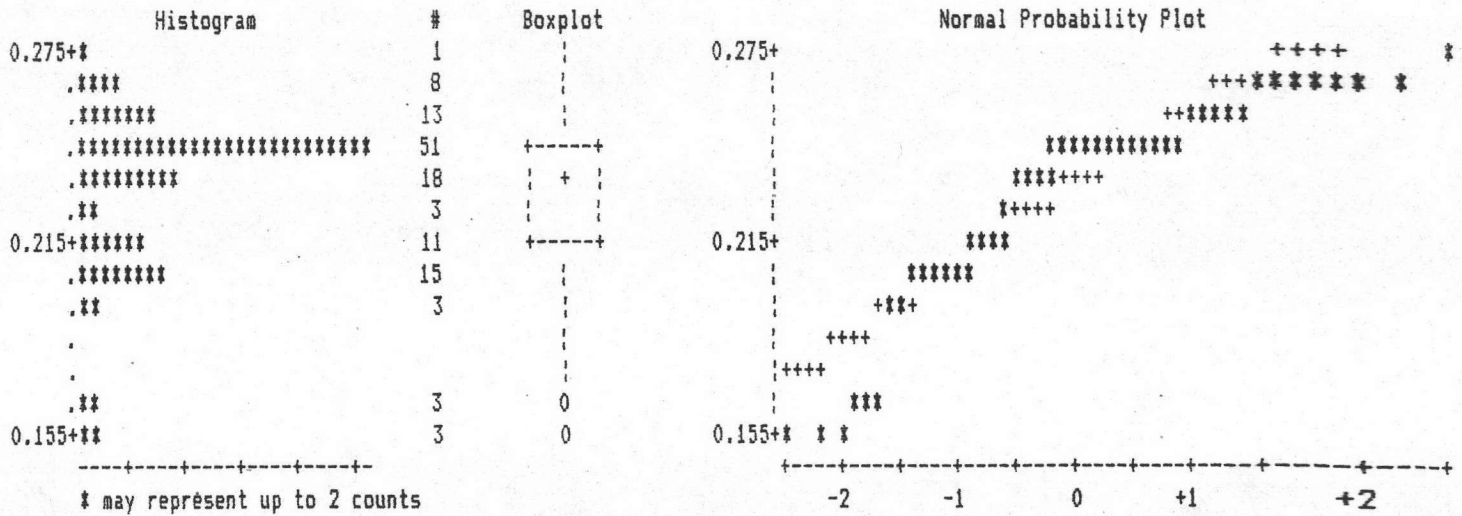
Variable=POST

POSTMENTUM

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	0.27159	99%	0.26983
Mean	0.232745	Sum	30.02414	75% Q3	0.24682	95%	0.26503
Std Dev	0.024413	Variance	0.000596	50% Med	0.24119	90%	0.25393
Skewness	-1.37533	Kurtosis	2.023979	25% Q1	0.21353	10%	0.20354
USS	7.064263	CSS	0.076287	0% Min	0.15299	5%	0.19259
CV	10.48911	Std Mean	0.002149			1%	0.15306
T:Mean=0	108.282	Prob> T	0.0001	Range	0.1186		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0.03329		
Num ^ = 0	129			Mode	0.15299		
W:Normal	0.848951	Prob<W	0.0				

Extremes

Lowest	ID	Highest	ID
0.15299	(K2101)	0.26625	(C-94)
0.15306	(K5107)	0.26757	(C-100)
0.15563	(K5113)	0.26833	(K3040)
0.16045	(K5115)	0.26983	(K3041)
0.16059	(K5110)	0.27159	(K3039)



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

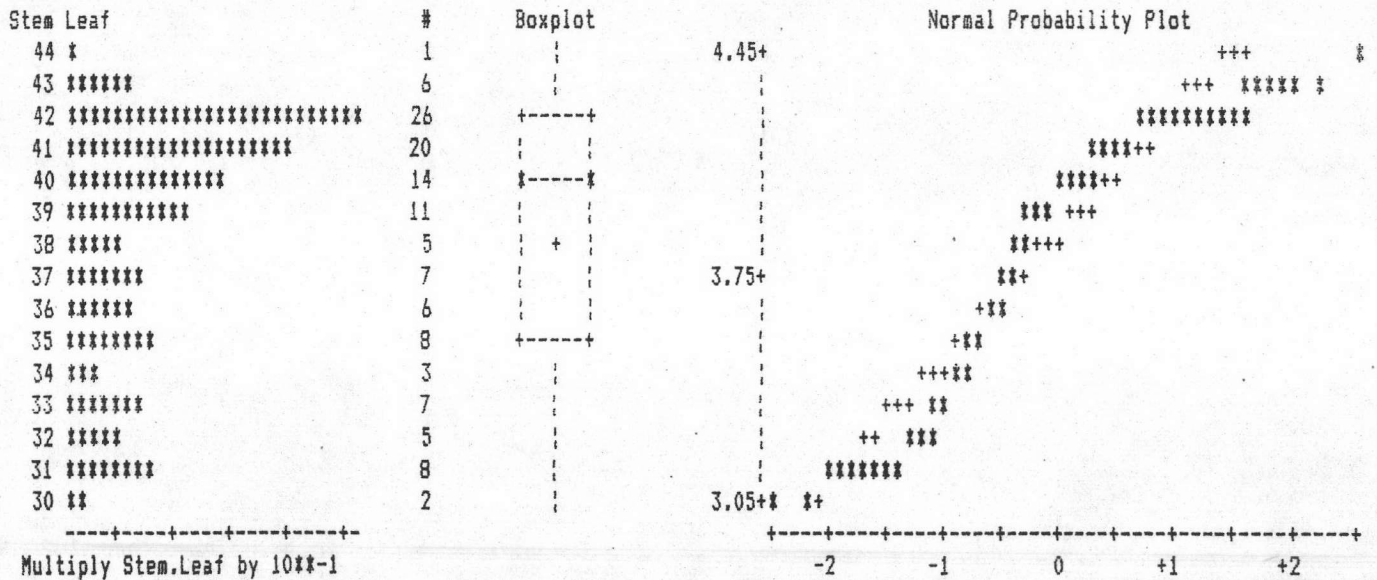
UNIVARIATE PROCEDURE

Variable=GLOS GLOSSA

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	4.46049	99%	4.33012
Mean	3.879437	Sum	500.4474	75% Q3	4.20476	95%	4.30084
Std Dev	0.382678	Variance	0.146443	50% Med	4.01394	90%	4.26195
Skewness	-0.71739	Kurtosis	-0.79228	25% Q1	3.59424	10%	3.23094
USS	1960.199	CSS	18.74467	0% Min	3.03122	5%	3.1616
CV	9.864275	Std Mean	0.033693			1%	3.04463
T:Mean=0	115.1409	Prob> T	0.0001	Range	1.42927		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0.61052		
Num ^= 0	129			Mode	3.03122		
W:Normal	0.870881	Prob<W	0.0				

Extremes

Lowest	ID	Highest	ID
3.03122	(K5010)	4.30791	(K4101)
3.04463	(K5207)	4.32777	(K1605)
3.11102	(K5210)	4.32789	(K2026)
3.12869	(K5113)	4.33012	(C-108)
3.14431	(K5209)	4.46049	(C-94)



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

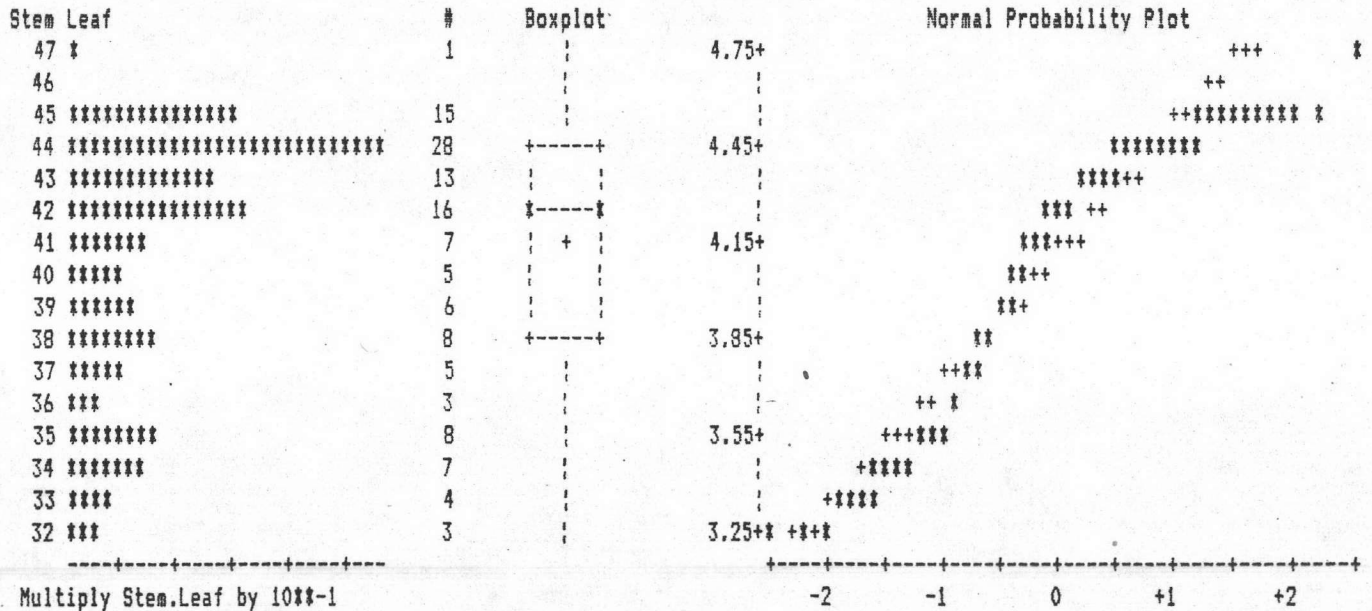
UNIVARIATE PROCEDURE

Variable=TONGUE

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	4.72674	99%	4.59018
Mean	4.112183	Sum	530.4716	75% Q3	4.43786	95%	4.54957
Std Dev	0.39612	Variance	0.156911	50% Med	4.25524	90%	4.51209
Skewness	-0.69136	Kurtosis	-0.84309	25% Q1	3.81265	10%	3.44399
USS	2201.481	CSS	20.08467	0% Min	3.27343	5%	3.38529
CV	9.632853	Std Mean	0.034876			1%	3.28231
T:Mean=0	117.9071	Prob> T	0.0001	Range	1.45331		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0.62521		
Num ^= 0	129			Mode	3.27343		
W:Normal	0.872507	Prob<W	0.0				

Extremes

Lowest	ID	Highest	ID
3.27343	(K5010)	4.57402	(K1605)
3.28231	(K5207)	4.57622	(K2026)
3.28432	(K5113)	4.57696	(K3041)
3.32219	(K5110)	4.59018	(C-108)
3.32815	(K2101)	4.72674	(C-94)



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

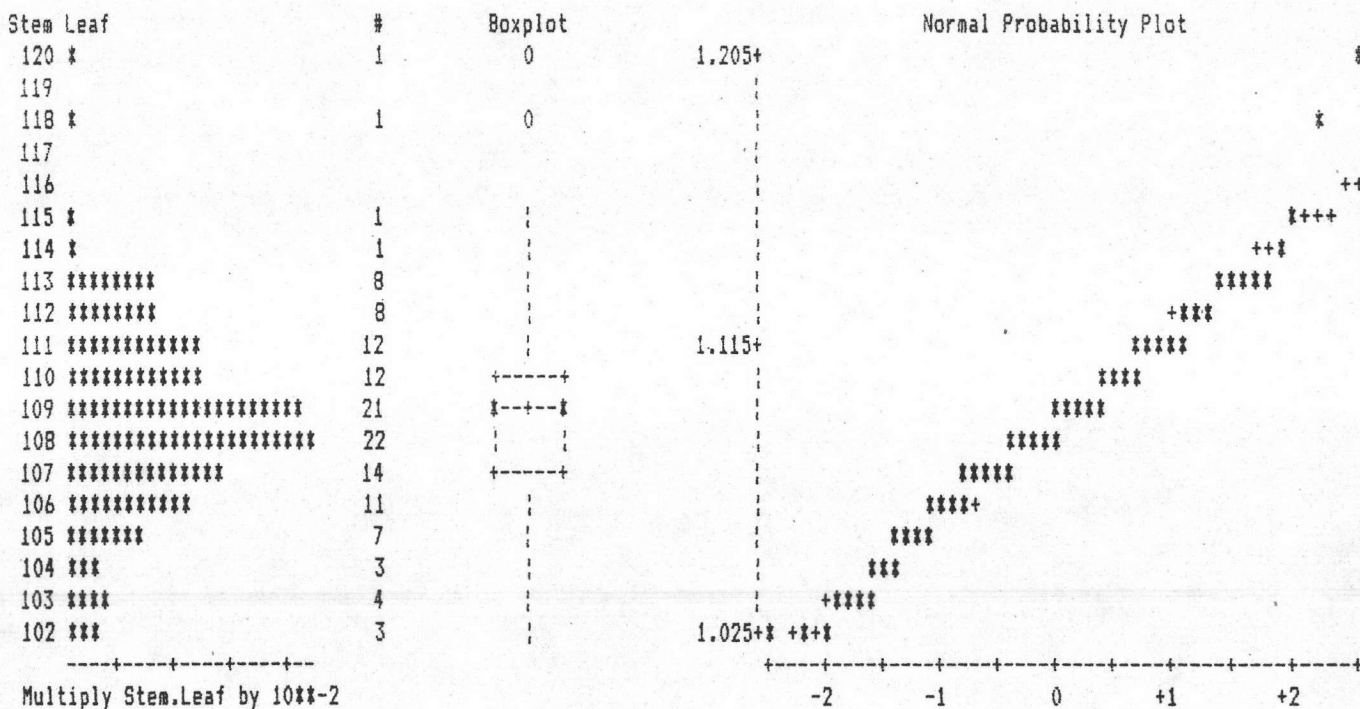
UNIVARIATE PROCEDURE

Variable=LPSEG LEFT PROXIMAL SEGMENT

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	1.20471	99%	1.18291
Mean	1.090397	Sum	140.6612	75% Q3	1.10934	95%	1.13361
Std Dev	0.029975	Variance	0.000899	50% Med	1.08967	90%	1.12938
Skewness	0.373227	Kurtosis	1.341143	25% Q1	1.0724	10%	1.05346
USS	153.4916	CSS	0.115008	0% Min	1.02119	5%	1.03813
CV	2.749001	Std Mean	0.002639			1%	1.02421
T:Mean=0	413.1616	Prob> T	0.0001	Range	0.18352		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0.03694		
Num ^= 0	129			Mode	1.02119		
W:Normal	0.9795	Prob<W	0.4244				

Extremes

Lowest	ID	Highest	ID
1.02119	(K5010)	1.13782	(K3041)
1.02421	(K4004)	1.14186	(K1102)
1.02555	(K2022)	1.1504	(K5107)
1.03271	(K5004)	1.18291	(C-108)
1.03357	(K5001)	1.20471	(C-94)



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=LDSEG LEFT DISTAL SEGMENT

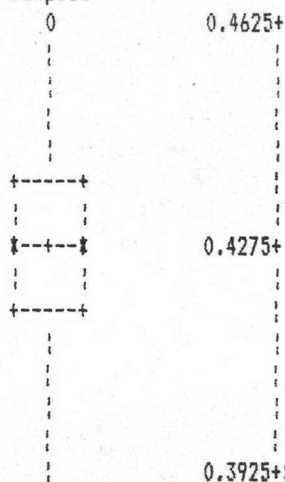
Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	0.46156	99%	0.45051
Mean	0.426148	Sum	54.97305	75% Q3	0.43495	95%	0.44459
Std Dev	0.013135	Variance	0.000173	50% Med	0.42831	90%	0.44213
Skewness	-0.42986	Kurtosis	0.015721	25% Q1	0.41799	10%	0.40646
USS	23.44872	CSS	0.022084	0% Min	0.39311	5%	0.40135
CV	3.082323	Std Mean	0.001156			1%	0.39419
T:Mean=0	368.4824	Prob> T	0.0001	Range	0.06845		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0.01696		
Num ^= 0	129			Mode	0.43495		
W:Normal	0.968961	Prob<W	0.0638				

Extremes

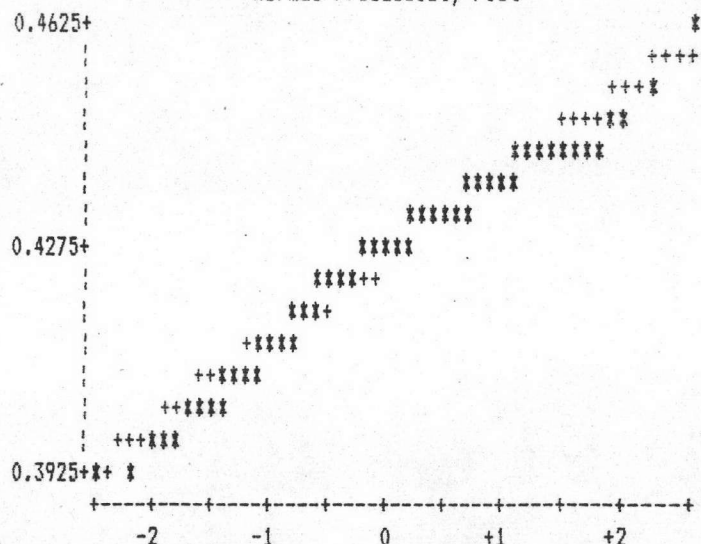
Lowest	ID	Highest	ID
0.39311	(K5001)	0.44475	(K4204)
0.39419	(CK-77)	0.44747	(K3039)
0.39515	(CK-75)	0.44889	(K3005)
0.39679	(C-100)	0.45051	(C-108)
0.39755	(CK-74)	0.46156	(C-94)

Stem Leaf	#
46 *	1
45 *	1
44 *****	5
44 *****	10
43 *****	22
43 *****	18
42 *****	20
42 *****	18
41 *****	10
41 *****	8
40 *****	6
40 *****	5
39 ***	3
39 **	2

Boxplot



Normal Probability Plot



Multiply Stem.Leaf by 10\*\*-2

DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=RPSEG RIGHT PROXIMAL SEGMENT

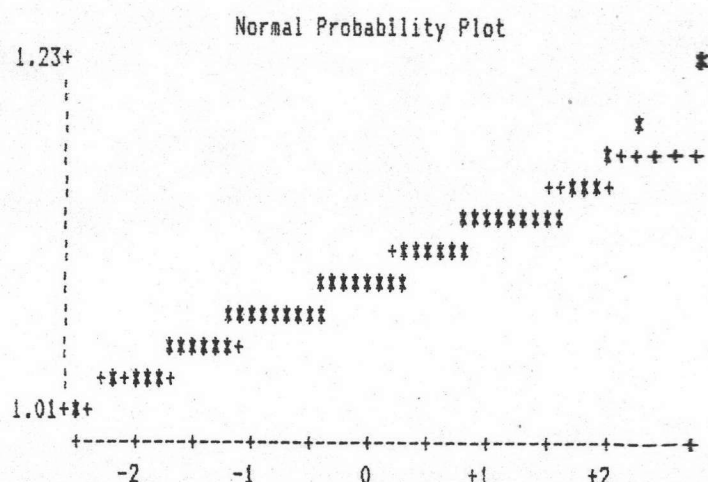
Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	1.23117	99%	1.19249
Mean	1.094503	Sum	141.1908	75% Q3	1.11434	95%	1.1395
Std Dev	0.032384	Variance	0.001049	50% Med	1.09165	90%	1.13457
Skewness	0.635719	Kurtosis	1.968389	25% Q1	1.07301	10%	1.05581
USS	154.668	CSS	0.134237	0% Min	1.01058	5%	1.04746
CV	2.958793	Std Mean	0.002851			1%	1.03089
T:Mean=0	383.8665	Prob> T	0.0001	Range	0.22059		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0.04133		
Num ^= 0	129			Mode	1.09069		
W:Normal	0.979706	Prob<W	0.4360				

Extremes

Lowest	ID	Highest	ID
1.01058	(K5010)	1.14728	(K5113)
1.03089	(K5004)	1.15434	(K1102)
1.03546	(K5015)	1.16064	(K3041)
1.03597	(K2022)	1.19249	(C-108)
1.03808	(K5001)	1.23117	(C-94)

Stem Leaf	#	Boxplot
122 *	1	0
120		
118 *	1	0
116 *	1	0
114 ****	4	0
112 *****	19	0
110 *****	27	+-----+
108 *****	33	*---*
106 *****	28	+-----+
104 *****	10	0
102 ****	4	0
100 *	1	0

Multiply Stem.Leaf by 10\*\*2



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=RDSEG RIGHT DISTAL SEGMENT

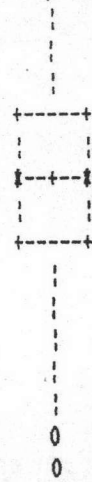
Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	0.4542	99%	0.45392
Mean	0.426148	Sum	54.97315	75% Q3	0.43602	95%	0.44661
Std Dev	0.013807	Variance	0.000191	50% Med	0.42839	90%	0.44239
Skewness	-0.50814	Kurtosis	0.143361	25% Q1	0.4174	10%	0.40753
USS	23.45112	CSS	0.0244	0% Min	0.38394	5%	0.4014
CV	3.239851	Std Mean	0.001216			1%	0.38875
T:Mean=0	350.566	Prob> T	0.0001	Range	0.07026		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0.01862		
Num ^= 0	129			Mode	0.41676		
W:Normal	0.971131	Prob<W	0.1015				

Extremes

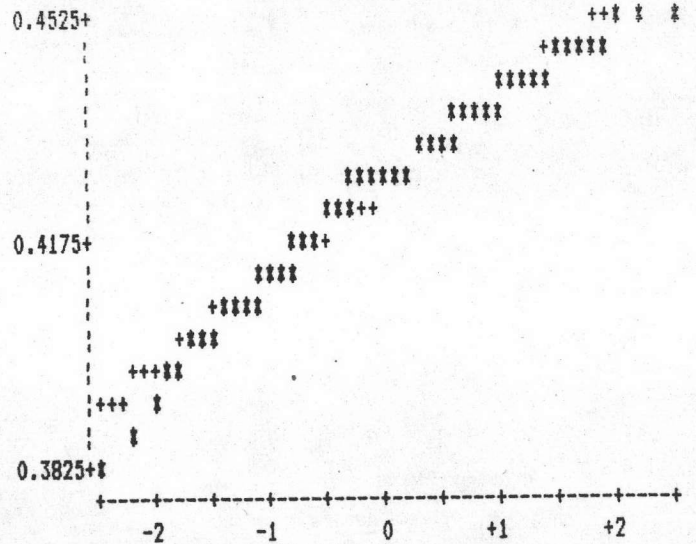
Lowest	ID	Highest	ID
0.38394	(CK-75)	0.4479	(K3010)
0.38875	(CK-77)	0.44916	(K3039)
0.39384	(C-100)	0.45098	(C-94)
0.3964	(K5001)	0.45392	(C-108)
0.39882	(C-118)	0.4542	(K4101)

Stem	Leaf	#
45	***	3
44	*****	6
44	*****	14
43	*****	12
43	*****	19
42	*****	25
42	*****	14
41	*****	10
41	*****	10
40	*****	7
40	****	4
39	**	2
39	*	1
38	*	1
38	*	1

Boxplot



Normal Probability Plot



Multiply Stem.Leaf by 10\*\*2

DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=LPALP LEFT LABIAL PALPI

Moments			
N	129	Sum Wgts	129
Mean	1.516545	Sum	195.6343
Std Dev	0.037277	Variance	0.00139
Skewness	0.297894	Kurtosis	1.878141
USS	296.866	CSS	0.177863
CV	2.458006	Std Mean	0.003282
T:Mean=0	462.0743	Prob> T	0.0001
Sgn Rank	4192.5	Prob> S	0.0001
Num ^= 0	129		
W:Normal	0.972677	Prob<W	0.1383

Quantiles(Def=5)			
100% Max	1.66627	99%	1.63342
75% Q3	1.5379	95%	1.56808
50% Med	1.51896	90%	1.55897
25% Q1	1.49813	10%	1.46238
0% Min	1.42254	5%	1.45002
		1%	1.42668
Range	0.24373		
Q3-Q1	0.03977		
Mode	1.42254		

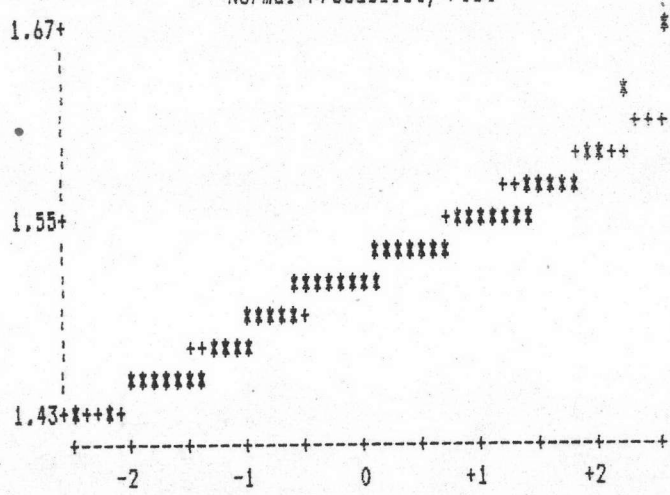
Extremes

Lowest	ID	Highest	ID
1.42254	(K5010)	1.57975	(K4204)
1.42668	(K5001)	1.58044	(K5107)
1.44459	(K5015)	1.58177	(K3041)
1.4483	(CK-75)	1.63342	(C-108)
1.44912	(K5205)	1.66627	(C-94)

Stem Leaf	#
166 *	1
164	
162 *	1
160	
158 ***	3
156 *****	5
154 *****	19
152 *****	34
150 *****	32
148 *****	13
146 *****	11
144 *****	8
142 **	2

#	Boxplot
1	*
1	0
3	
5	
19	
34	+-----+
32	*--+--*
13	+-----+
11	
8	
2	0

Normal Probability Plot



Multiply Stem.Leaf by 10\*\*2



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=RPALP RIGHT LABIAL PALPI

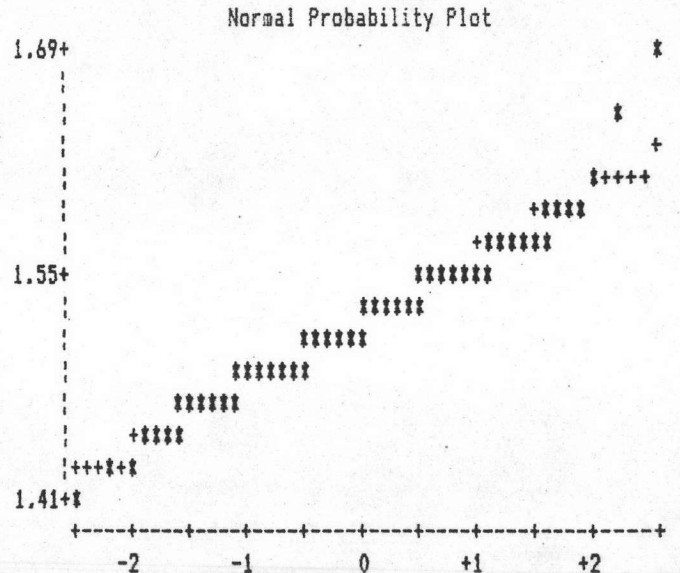
Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	1.68215	99%	1.64641
Mean	1.520651	Sum	196.164	75% Q3	1.54447	95%	1.58
Std Dev	0.039886	Variance	0.001591	50% Med	1.52175	90%	1.5664
Skewness	0.437216	Kurtosis	1.868516	25% Q1	1.4976	10%	1.46668
USS	298.5006	CSS	0.20363	0% Min	1.41672	5%	1.4577
CV	2.622927	Std Mean	0.003512			1%	1.43448
T:Mean=0	433.0208	Prob> T	0.0001	Range	0.26543		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0.04687		
Num ^= 0	129			Mode	1.41672		
W:Normal	0.980848	Prob<W	0.5023				

Extremes

Lowest	ID	Highest	ID
1.41672	(K5010)	1.58139	(C-89)
1.43448	(K5001)	1.58486	(K4202)
1.43688	(K5015)	1.60172	(K3041)
1.44255	(CK-75)	1.64641	(C-108)
1.45005	(K5205)	1.68215	(C-94)

Stem Leaf	#	Boxplot
168 *	1	0
166		
164 *	1	0
162		
160 *	1	:
158 ****	4	:
156 *****	11	:
154 *****	21	+-----+
152 *****	27	*---*---
150 *****	25	: : :
148 *****	20	+-----+
146 *****	11	:
144 ****	4	:
142 **	2	:
140 *	1	0

Multiply Stem.Leaf by 10\*\*=-2



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=LPINDEX LEFT PALPI INDEX

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	2.735794	99%	2.728809
Mean	2.564876	Sum	330.869	75% Q3	2.628336	95%	2.707135
Std Dev	0.082811	Variance	0.006858	50% Med	2.559739	90%	2.683234
Skewness	0.133883	Kurtosis	-0.76474	25% Q1	2.507732	10%	2.448461
USS	849.5155	CSS	0.877771	0% Min	2.405981	5%	2.431904
CV	3.228638	Std Mean	0.007291			1%	2.408385
T:Mean=0	351.7835	Prob> T	0.0001	Range	0.329813		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0.120604		
Num ^= 0	129			Mode	2.405981		
W:Normal	0.958175	Prob<W	0.0041				

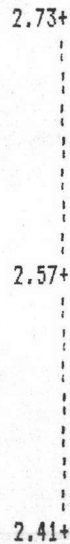
Extremes

Lowest	ID	Highest	ID
2.405981	(K2001)	2.719	(K1102)
2.408385	(K4004)	2.725198	(C-130)
2.418785	(K5004)	2.725729	(CK-74)
2.422628	(K2022)	2.728809	(C-100)
2.424316	(K4101)	2.735794	(K2101)

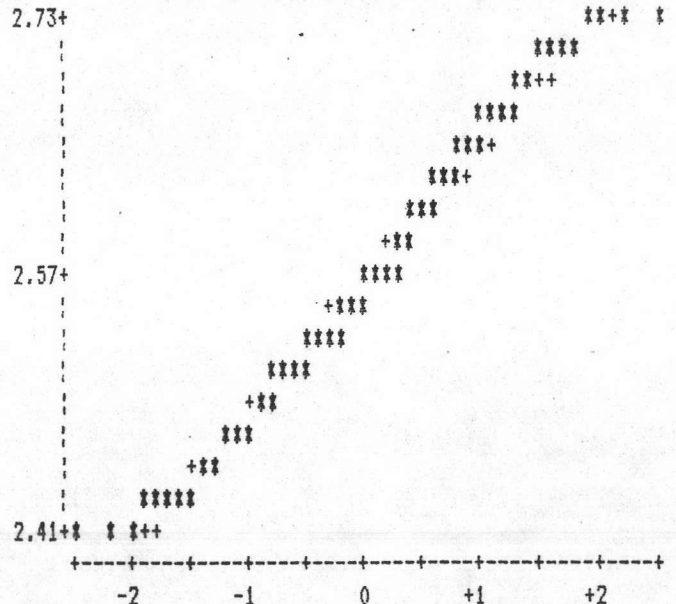
Stem Leaf	#
272 ****	4
270 *****	5
268 ****	4
266 *****	7
264 *****	7
262 *****	10
260 *****	7
258 *****	6
256 *****	15
254 *****	12
252 *****	14
250 *****	10
248 *****	6
246 *****	8
244 *****	5
242 *****	6
240 ***	3

Multiply Stem.Leaf by 10\*\*2

Boxplot



Normal Probability Plot





DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

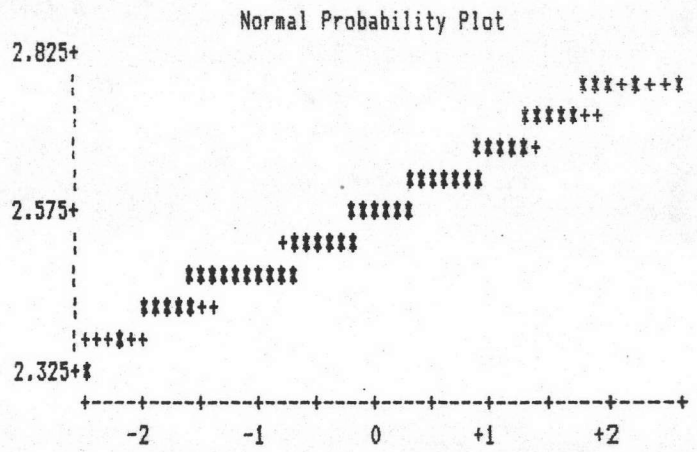
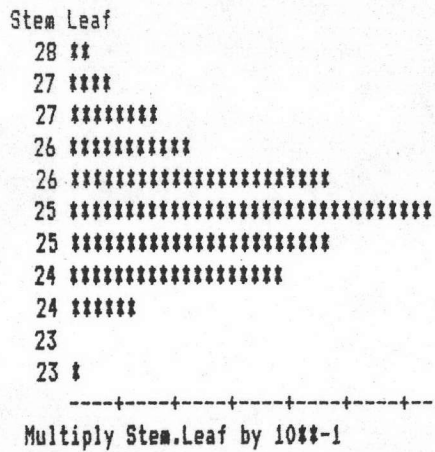
UNIVARIATE PROCEDURE

Variable=RPINDEX RIGHT PALPI INDEX

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	2.798566	99%	2.797281
Mean	2.574544	Sum	332.1162	75% Q3	2.629136	95%	2.73325
Std Dev	0.089067	Variance	0.007933	50% Med	2.566588	90%	2.695971
Skewness	0.324533	Kurtosis	-0.0141	25% Q1	2.506051	10%	2.474762
USS	856.0634	CSS	1.015414	0% Min	2.324815	5%	2.444624
CV	3.459523	Std Mean	0.007842			1%	2.39939
T:Mean=0	328.3058	Prob> T	0.0001	Range	0.473751		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0.123085		
Num ^= 0	129			Mode	2.324815		
W:Normal	0.975751	Prob<W	0.2415				

Extremes

Lowest	ID	Highest	ID
2.324815	(K4101)	2.764791	(C-130)
2.39939	(K2001)	2.766672	(CK-75)
2.420812	(K5004)	2.771941	(CK-77)
2.421544	(K4107)	2.797281	(K5113)
2.441733	(K3034)	2.798566	(C-100)





DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=STLN STERNITE LENGTH

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	2.34694	99%	2.34426
Mean	2.219774	Sum	286.3509	75% Q3	2.25404	95%	2.31086
Std Dev	0.054227	Variance	0.002941	50% Med	2.22076	90%	2.2874
Skewness	-0.15641	Kurtosis	-0.0513	25% Q1	2.18996	10%	2.14116
USS	636.0108	CSS	0.376389	0% Min	2.08572	5%	2.11787
CV	2.442893	Std Mean	0.004774			1%	2.09346
T:Mean=0	464.933	Prob> T	0.0001	Range	0.26122		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0.06408		
Num ^= 0	129			Mode	2.08572		
W:Normal	0.977268	Prob<W	0.3084				

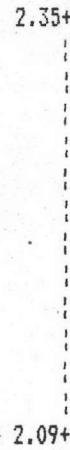
Extremes

Lowest	ID	Highest	ID
2.08572	(K5207)	2.31309	(K2401)
2.09346	(K5010)	2.32209	(K3038)
2.10414	(K5001)	2.32679	(K3037)
2.10588	(K5015)	2.34426	(K3027)
2.10699	(C-131)	2.34694	(K3039)

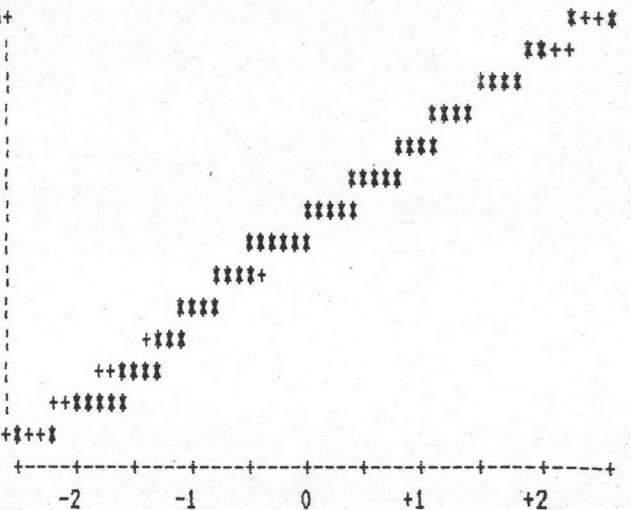
Stem Leaf	#
234 **	2
232 **	2
230 ****	6
228 ****	7
226 ****	11
224 ****	17
222 ****	20
220 ****	23
218 ****	14
216 ****	11
214 ****	4
212 ****	5
210 ****	5
208 **	2

Multiply Stem.Leaf by 10\*\*-2.

Boxplot



Normal Probability Plot



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=WXLN WAX MIRROR LENGTH

Moments			
N	129	Sum Wgts	129
Mean	0.875536	Sum	112.9441
Std Dev	0.031516	Variance	0.000993
Skewness	-0.32271	Kurtosis	-0.35784
USS	99.01371	CSS	0.12714
CV	3.599674	Std Mean	0.002775
T:Mean=0	315.5235	Prob> T	0.0001
Sgn Rank	4192.5	Prob> S	0.0001
Num ^= 0	129		
W:Normal	0.973406	Prob<W	0.1590

Quantiles(Def=5)			
100% Max	0.94961	99%	0.93243
75% Q3	0.8961	95%	0.92462
50% Med	0.87949	90%	0.91324
25% Q1	0.85545	10%	0.82803
0% Min	0.79407	5%	0.81937
		1%	0.80527
Range	0.15554		
Q3-Q1	0.04065		
Mode	0.8564		

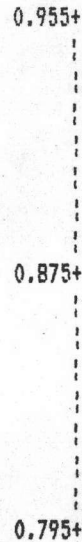
Extremes

Lowest	ID	Highest	ID
0.79407	(K5207)	0.92682	(K3037)
0.80527	(C-132)	0.9273	(K4212)
0.8098	(K5010)	0.93121	(K3038)
0.80989	(C-100)	0.93243	(K2301)
0.81635	(K3004)	0.94961	(K3039)

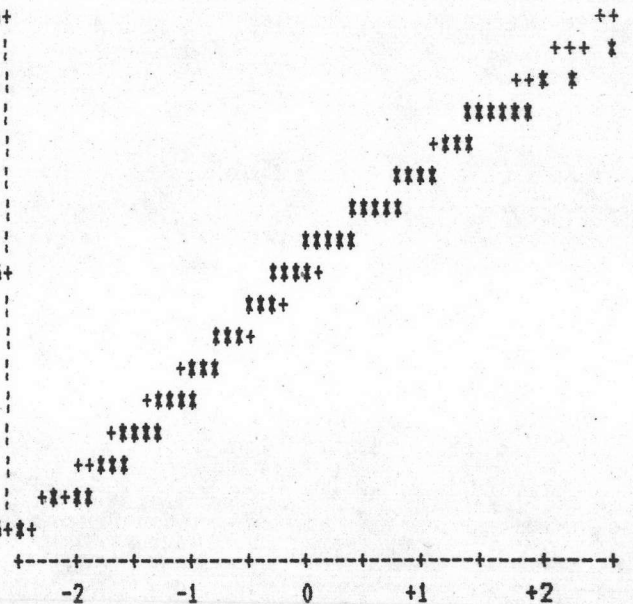
Stem Leaf	#
95	1
94	
93	2
92	7
91	7
90	10
89	22
88	15
87	15
86	12
85	11
84	7
83	7
82	6
81	5
80	1
79	1

Multiply Stem.Leaf by 10<sup>-2</sup>

Boxplot



Normal Probability Plot





DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=WXWDB

STERNUM WIDTH

Moments			
N	129	Sum Wgts	129
Mean	0.29138	Sum	37.58799
Std Dev	0.028257	Variance	0.000798
Skewness	0.148218	Kurtosis	-0.51613
USS	11.05458	CSS	0.102203
CV	9.697666	Std Mean	0.002488
T:Mean=0	117.1191	Prob> T	0.0001
Sgn Rank	4192.5	Prob> S	0.0001
Num ^= 0	129		
W:Normal	0.973262	Prob<W	0.1548

Quantiles(Def=5)			
100% Max	0.35255	99%	0.35122
75% Q3	0.30905	95%	0.33749
50% Med	0.28945	90%	0.33086
25% Q1	0.26971	10%	0.25351
0% Min	0.21915	5%	0.24801
		1%	0.24196
Range	0.1334		
Q3-Q1	0.03934		
Mode	0.28351		

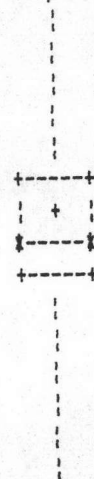
Extremes

Lowest	ID	Highest	ID
0.21915	(K1206)	0.34825	(K1511)
0.24196	(K1605)	0.34921	(K3217)
0.24302	(K5001)	0.35099	(K2008)
0.24424	(K3004)	0.35122	(C-100)
0.24661	(K1102)	0.35255	(K1003)

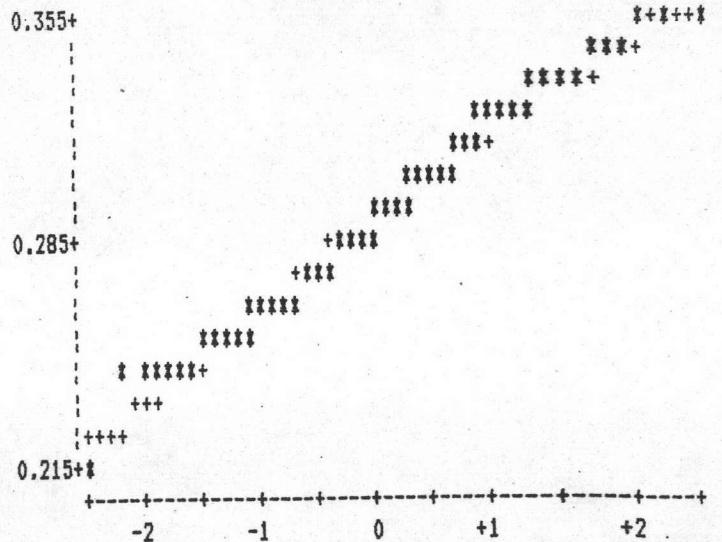
Stem Leaf	#
35 ***	3
34 ***	3
33 ****	7
32 *****	10
31 *****	9
30 *****	16
29 *****	16
28 *****	20
27 *****	13
26 *****	14
25 *****	10
24 *****	7
23	
22	
21 *	1

Multiply Stem.Leaf by 10\*\*2

Boxplot



Normal Probability Plot





DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

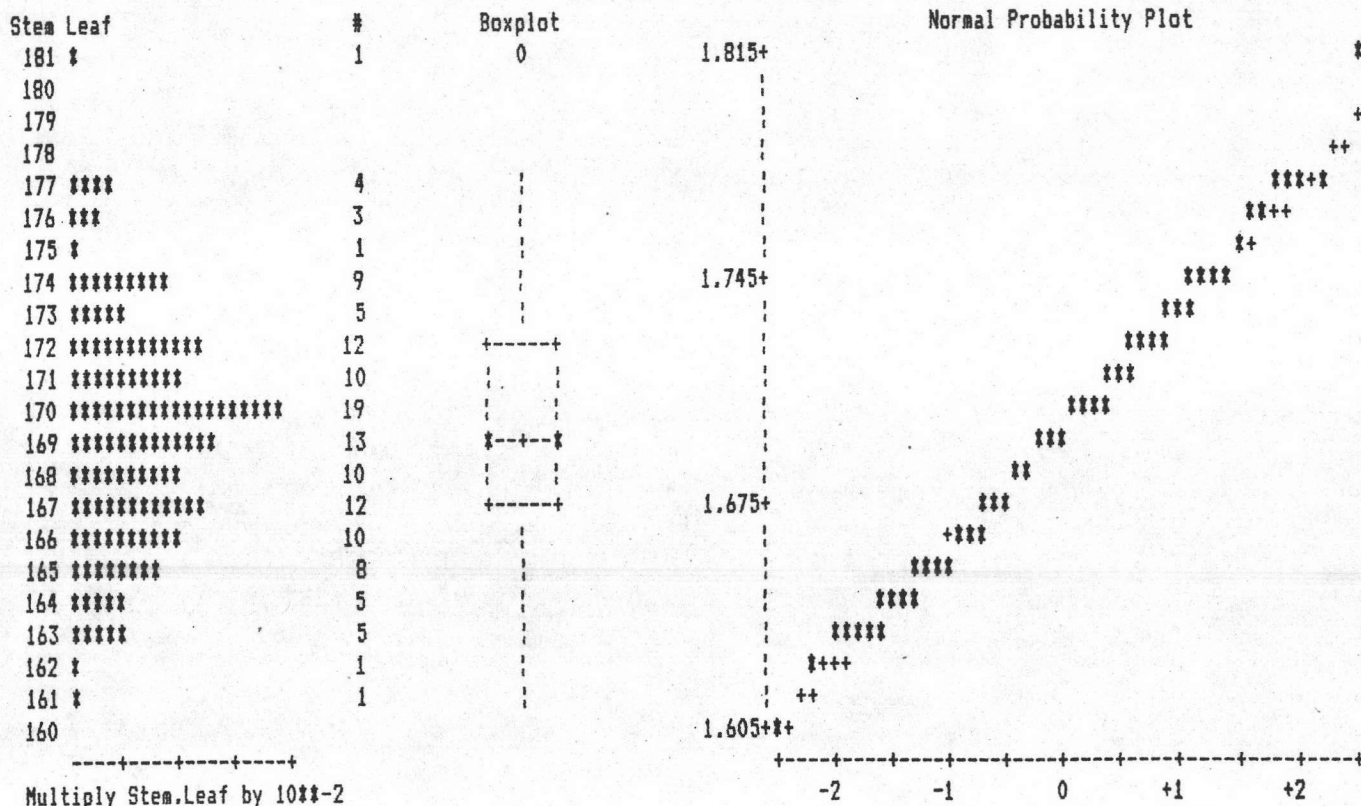
UNIVARIATE PROCEDURE

Variable=TER3      TERGITE 3 WIDTH

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	1.81647	99%	1.77645
Mean	1.698219	Sum	219.0703	75% Q3	1.72281	95%	1.76508
Std Dev	0.036826	Variance	0.001356	50% Med	1.69909	90%	1.74505
Skewness	0.262664	Kurtosis	0:095587	25% Q1	1.6722	10%	1.65101
USS	372.203	CSS	0.173584	0% Min	1.60959	5%	1.63813
CV	2.168483	Std Mean	0.003242			1%	1.62611
T:Mean=0	523.7679	Prob> T	0.0001	Range	0.20688		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0.05061		
Num ^= 0	129			Mode	1.60959		
W:Normal	0.988091	Prob<W	0.8901				

Extremes

Lowest	ID	Highest	ID
1.60959	(C-131)	1.77098	(K3038)
1.62611	(K5207)	1.77363	(K3041)
1.63094	(K4010)	1.77377	(K3037)
1.63312	(K5004)	1.77645	(K2014)
1.63481	(K4106)	1.81647	(K3039)



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=TER4

TERGITE 4 WIDTH

Moments

N	129	Sum Wgts	129
Mean	1.676811	Sum	216.3086
Std Dev	0.039075	Variance	0.001527
Skewness	0.135209	Kurtosis	0.130337
USS	362.904	CSS	0.195433
CV	2.330289	Std Mean	0.00344
T:Mean=0	487.3995	Prob> T	0.0001
Sgn Rank	4192.5	Prob> S	0.0001
Num ^= 0	129		
W:Normal	0.990058	Prob<W	0.9483

Quantiles(Def=5)

100% Max	1.80238	99%	1.76541
75% Q3	1.70578	95%	1.73674
50% Med	1.67521	90%	1.72236
25% Q1	1.64836	10%	1.62809
0% Min	1.57446	5%	1.61724
		1%	1.589
Range	0.22792		
Q3-Q1	0.05742		
Mode	1.71514		

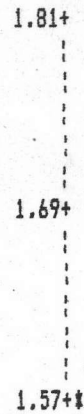
Extremes

Lowest	ID	Highest	ID
1.57446	(K5207)	1.74626	(K3038)
1.589	(K5015)	1.75255	(K2014)
1.60161	(C-131)	1.76375	(K3037)
1.60592	(K5004)	1.76541	(K3041)
1.60756	(K4010)	1.80238	(K3039)

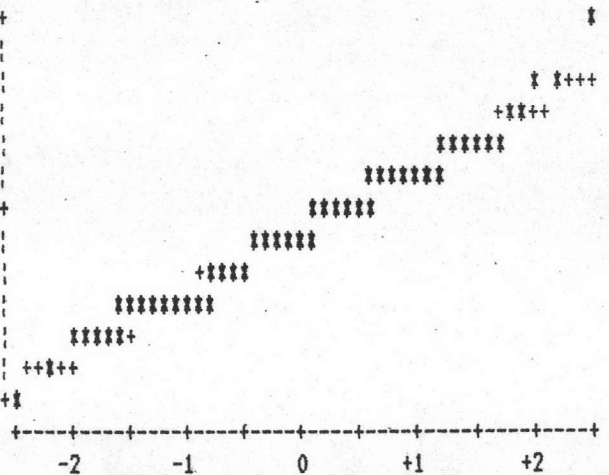
Stem Leaf	#
180 *	1
178	
176 **	2
174 **	2
172 ****	10
170 ****	21
168 ****	23
166 ****	28
164 ****	16
162 ****	19
160 ****	5
158 *	1
156 *	1

Multiply Stem.Leaf by 10\*\*-2

Boxplot



Normal Probability Plot



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=TER3\_4      TER3+TER4

Moments			
N	129	Sum Wgts	129
Mean	3.37503	Sum	435.3789
Std Dev	0.074453	Variance	0.005543
Skewness	0.227404	Kurtosis	0.16661
USS	1470.126	CSS	0.70954
CV	2.206001	Std Mean	0.006555
T:Mean=0	514.86	Prob> T	0.0001
Sgn Rank	4192.5	Prob> S	0.0001
Num ^= 0	129		
W:Normal	0.988294	Prob<W	0.8973

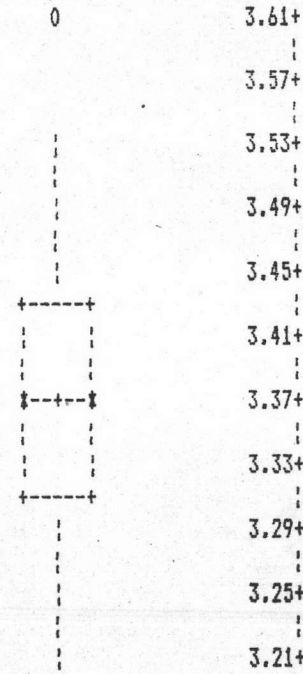
Quantiles(Def=5)			
100% Max	3.61885	99%	3.53904
75% Q3	3.42505	95%	3.50183
50% Med	3.37151	90%	3.46144
25% Q1	3.31823	10%	3.28319
0% Min	3.20057	5%	3.25967
		1%	3.2112
Range	0.41828		
Q3-Q1	0.10682		
Mode	3.20057		

Extremes

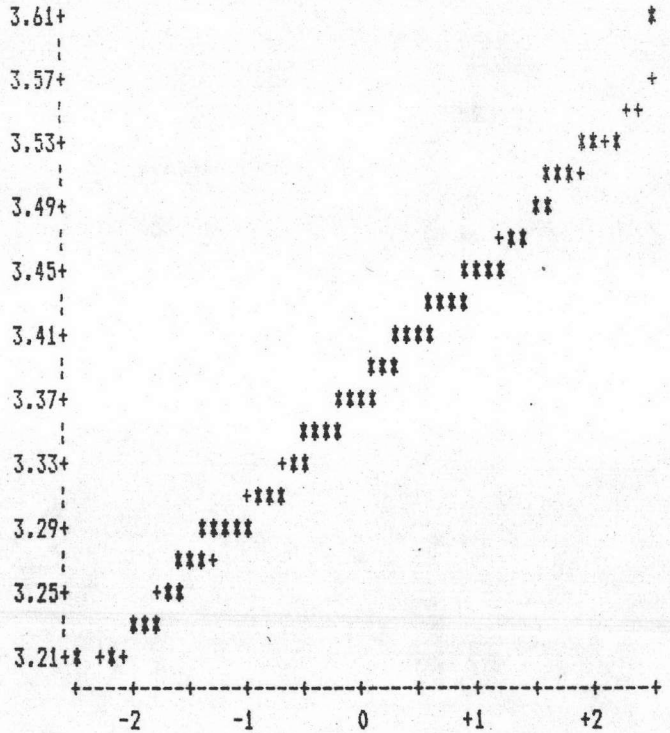
Lowest ID	Highest ID
3.20057(K5207)	3.51724(K3038)
3.2112(C-131)	3.529(K2014)
3.23266(K5015)	3.53752(K3037)
3.2385(K4010)	3.53904(K3041)
3.23904(K5004)	3.61885(K3039)

Stem Leaf	#
360 *	1
358	
356	
354	
352 ***	3
350 ***	3
348 **	2
346 *****	5
344 *****	10
342 *****	11
340 *****	15
338 *****	10
336 *****	13
334 *****	16
332 *****	7
330 *****	11
328 *****	12
326 ****	4
324 *	1
322 ***	3
320 **	2

Boxplot



Normal Probability Plot



Multiply Stem.Leaf by 10\*\*-2

+

DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=TOMA

TOMENTUM A

Moments			
N	129	Sum Wgts	129
Mean	0.17744	Sum	22.88975
Std Dev	0.046975	Variance	0.002207
Skewness	0.303304	Kurtosis	-0.22984
USS	4.344012	CSS	0.282457
CV	26.47401	Std Mean	0.004136
T:Mean=0	42.90176	Prob> T	0.0001
Sgn Rank	4192.5	Prob> S	0.0001
Num ^= 0	129		
W:Normal	0.975555	Prob<W	0.2337

Quantiles(Def=5)			
100% Max	0.3133	99%	0.27999
75% Q3	0.20883	95%	0.26202
50% Med	0.17548	90%	0.24392
25% Q1	0.14624	10%	0.11682
0% Min	0.07883	5%	0.10759
		1%	0.08615
Range	0.23447		
Q3-Q1	0.06259		
Mode	0.18515		

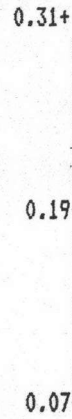
Extremes

Lowest ID	Highest ID
0.07883(K2213)	0.26836(K3040)
0.08615(K5013)	0.27099(K1206)
0.09446(K5210)	0.2725(K3038)
0.09572(K5001)	0.27999(K3023)
0.10232(K4010)	0.3133(K3037)

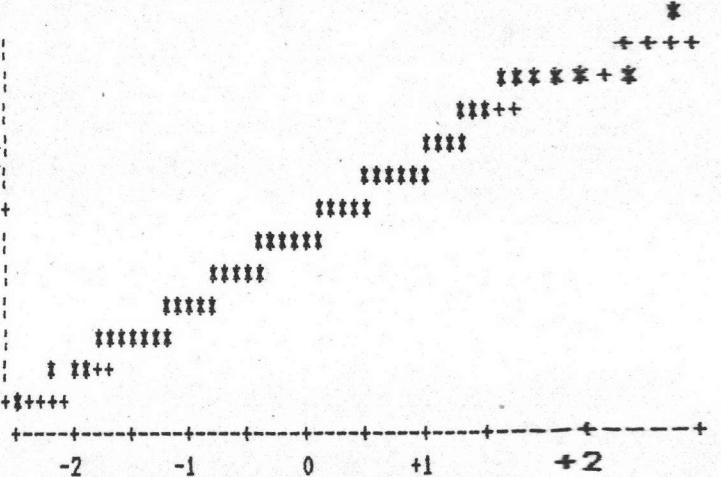
Stem Leaf	#
30 *	1
28 *	1
26 *****	6
24 *****	5
22 *****	7
20 *****	20
18 *****	18
16 *****	26
14 *****	17
12 *****	14
10 *****	10
8 ***	3
6 *	1

Multiply Stem.Leaf by 10\*\*-2

Boxplot



Normal Probability Plot



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=TOMB

TOMENTUM B

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	0.96378	99%	0.96245
Mean	0.84775	Sum	109.3597	75% Q3	0.88337	95%	0.93331
Std Dev	0.053447	Variance	0.002857	50% Med	0.85094	90%	0.92116
Skewness	-0.09686	Kurtosis	-0.57473	25% Q1	0.80716	10%	0.77185
USS	93.07529	CSS	0.365642	0% Min	0.7267	5%	0.75628
CV	6.304568	Std Mean	0.004706			1%	0.73635
T:Mean=0	180.1522	Prob> T	0.0001	Range	0.23708		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0.07621		
Num ^= 0	129			Mode	0.92116		
W:Normal	0.972647	Prob<W	0.1375				

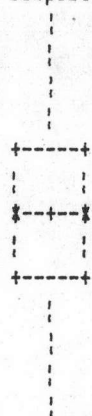
Extremes

Lowest	ID	Highest	ID
0.7267	(K3037)	0.94197	(K5210)
0.73635	(K3023)	0.94587	(K1005)
0.74207	(K3105)	0.95101	(K1003)
0.74532	(K1206)	0.96245	(K5013)
0.75091	(K1605)	0.96378	(K5201)

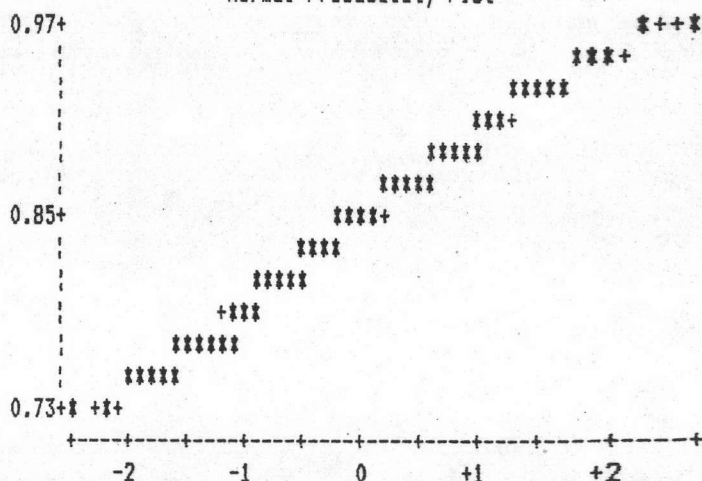
Stem Leaf	#
96 **	2
94 ***	3
92 ****	9
90 *****	7
88 ****	17
86 *****	19
84 *****	17
82 *****	14
80 *****	17
78 *****	7
76 *****	10
74 *****	5
72 **	2

Multiply Stem.Leaf by 10\*\*-2

Boxplot



Normal Probability Plot





DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=ST6T STERNITE 6 TRANSVERSAL

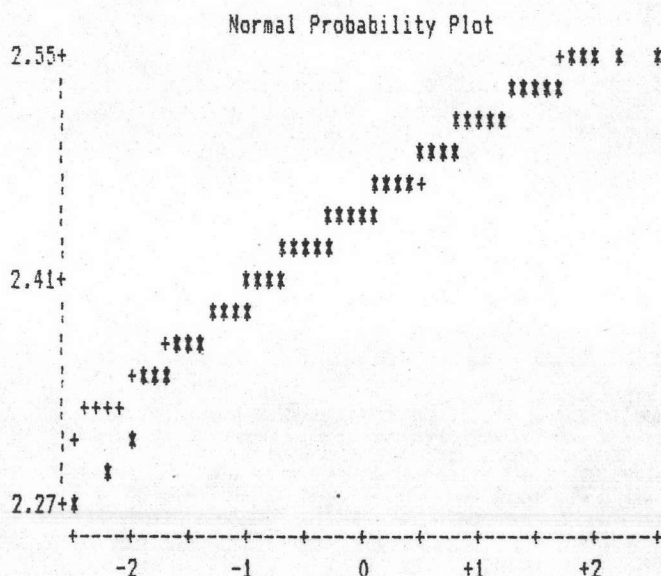
Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	2.55243	99%	2.55021
Mean	2.452718	Sum	316.4006	75% Q3	2.48941	95%	2.53205
Std Dev	0.05442	Variance	0.002961	50% Med	2.45394	90%	2.52213
Skewness	-0.59594	Kurtosis	0.750945	25% Q1	2.4238	10%	2.38371
USS	776.4205	CSS	0.379071	0% Min	2.26573	5%	2.36052
CV	2.218746	Std Mean	0.004791			1%	2.28522
T:Mean=0	511.9025	Prob> T	0.0001	Range	0.2867		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0.06561		
Num ^= 0	129			Mode	2.26573		
W:Normal	0.965706	Prob<W	0.0300				

Extremes

Lowest	ID	Highest	ID
2.26573	(C-100)	2.54168	(K3041)
2.28522	(K5010)	2.54726	(K3204)
2.31109	(K5015)	2.55019	(K3217)
2.34655	(K1602)	2.55021	(K2010)
2.35271	(K5110)	2.55243	(K3027)

Stem Leaf	#	Boxplot
254 *****	5	
252 *****	9	
250 *****	14	
248 *****	16	+-----+
246 *****	14	
244 *****	22	+-----+
242 *****	20	
240 *****	8	
238 *****	10	
236 *****	5	
234 ***	3	
232		
230 *	1	0
228 *	1	0
226 *	1	0

Multiply Stem.Leaf by 10\*\*2



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

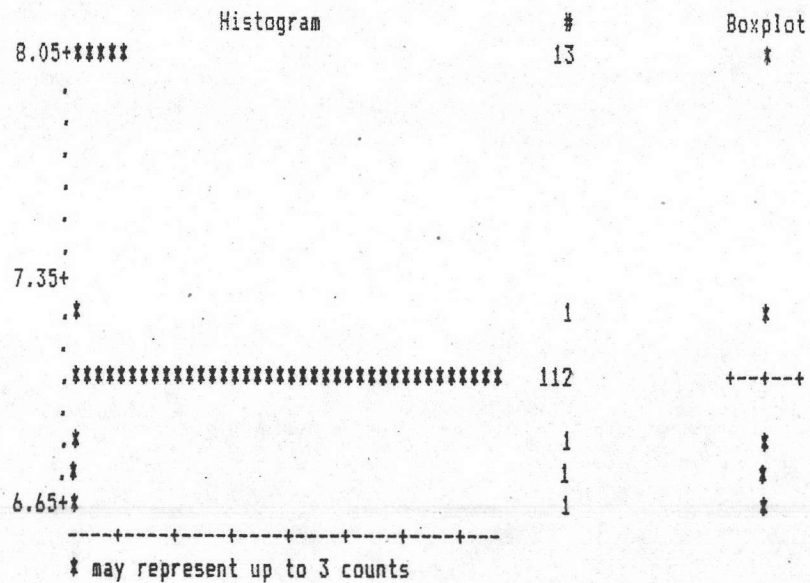
UNIVARIATE PROCEDURE

Variable=PIG2 PIGMENT TERGITE 2

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	8	99%	8
Mean	7.095349	Sum	915.3	75% Q3	7	95%	8
Std Dev	0.308185	Variance	0.094978	50% Med	7	90%	8
Skewness	2.526618	Kurtosis	4.923199	25% Q1	7	10%	7
USS	6506.53	CSS	12.15721	0% Min	6.6	5%	7
CV	4.343484	Std Mean	0.027134			1%	6.7
T:Mean=0	261.4909	Prob> T	0.0001	Range	1.4		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0		
Num ^= 0	129			Mode	7		
W:Normal	0.409934	Prob<W	0.0				

Extremes

Lowest	ID	Highest	ID
6.6	(K1601 )	8	(K2021 )
6.7	(K3027 )	8	(K2024 )
6.8	(K3010 )	8	(K2025 )
7	(K5210 )	8	(K3014 )
7	(K5209 )	8	(K3023 )



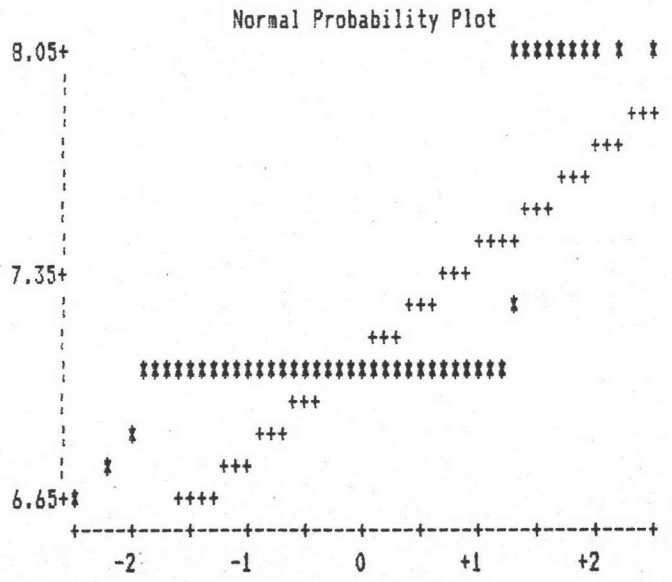


DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=PI62

PIGMENT TERGITE 2



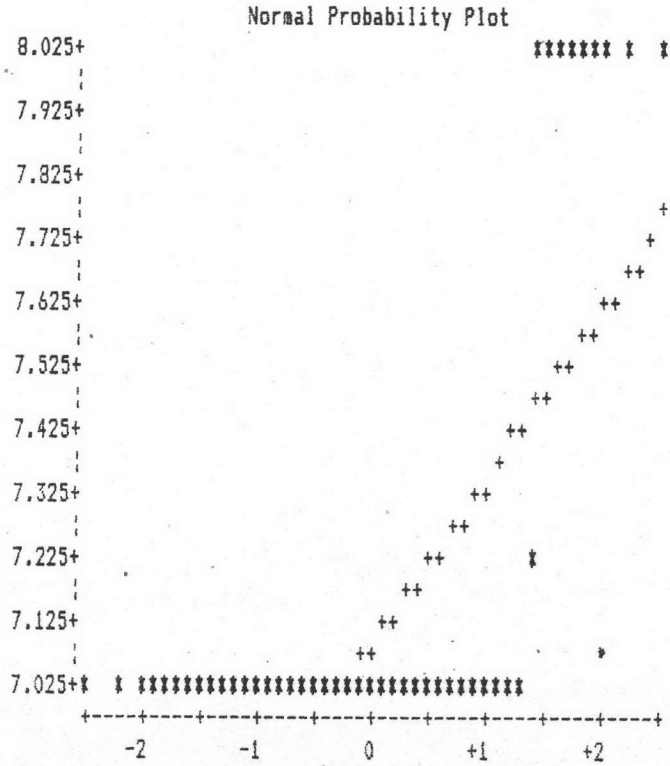


DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=PIG3

PIGMENT TERGITE 3



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

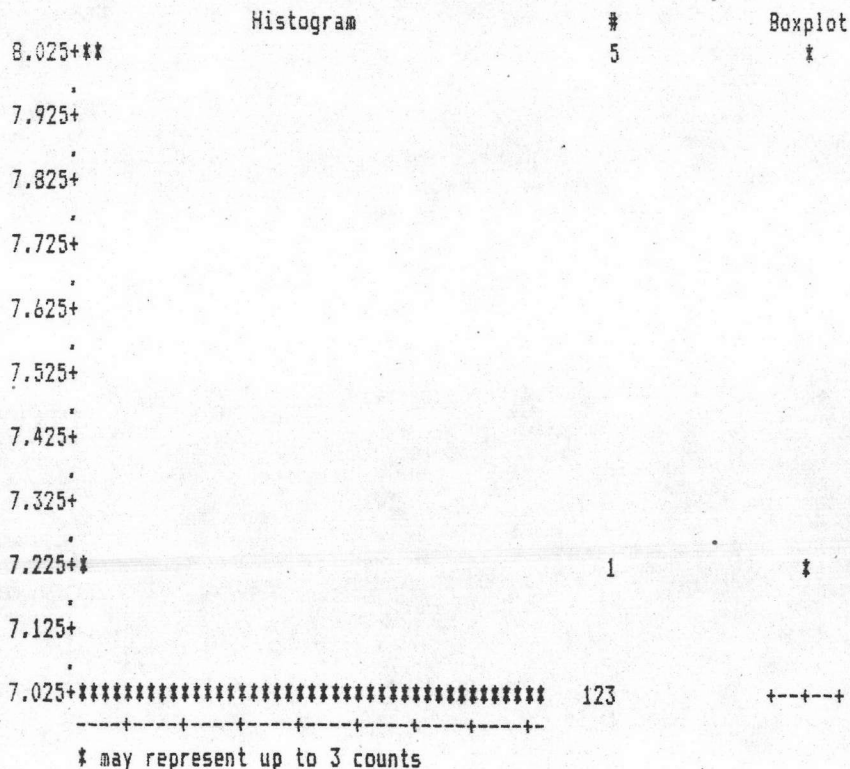
Variable=PIG4

PIGMENT TERGITE 4

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	8	99%	8
Mean	7.04031	Sum	908.2	75% Q3	7	95%	7
Std Dev	0.194261	Variance	0.037737	50% Med	7	90%	7
Skewness	4.779573	Kurtosis	21.31763	25% Q1	7	10%	7
USS	6398.84	CSS	4.830388	0% Min	7	5%	7
CV	2.75927	Std Mean	0.017104			1%	7
T:Mean=0	411.624	Prob> T	0.0001	Range	1		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0		
Num ^= 0	129			Mode	7		
W:Normal	0.211971	Prob<W	0.0				

Extremes

Lowest	ID	Highest	ID
7(K5210	)	8(K1104	)
7(K5209	)	8(K1401	)
7(K5207	)	8(K1402	)
7(K5205	)	8(K1403	)
7(K5201	)	8(K3023	)



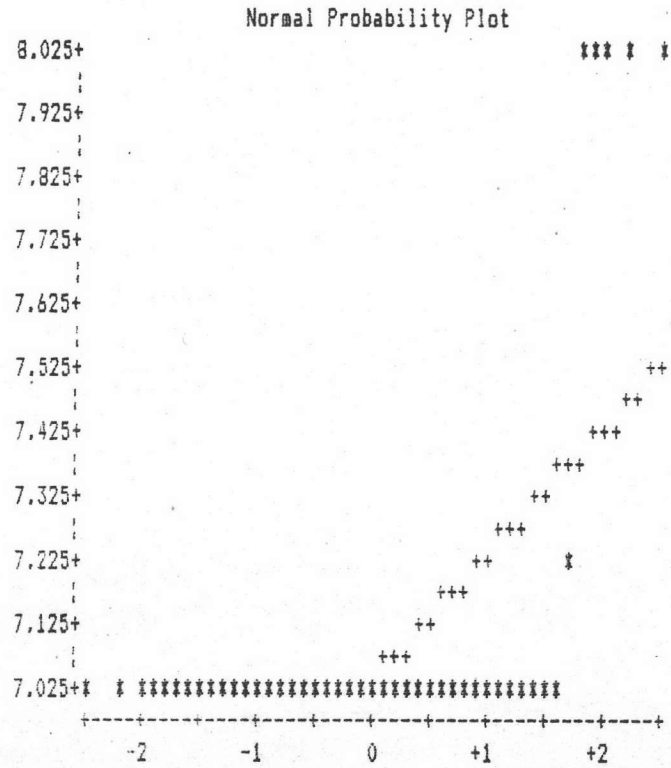
+

DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=PI64

PIGMENT TERGITE 4



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

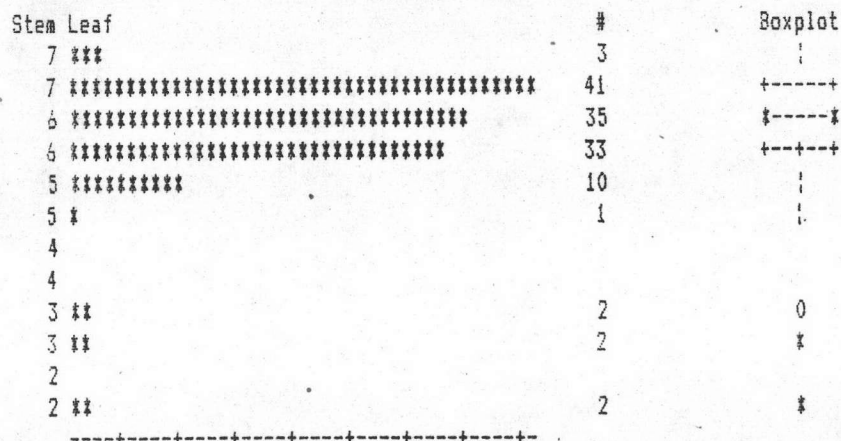
UNIVARIATE PROCEDURE

Variable=PIGS PIGMENT SCUTELLUM

Moments				Quantiles(Def=5)			
N	129	Sum Wgts	129	100% Max	7.8	99%	7.8
Mean	6.427907	Sum	829.2	75% Q3	7	95%	7.1
Std Dev	0.922461	Variance	0.850934	50% Med	6.7	90%	7
Skewness	-2.63352	Kurtosis	8.548959	25% Q1	6.1	10%	5.8
USS	5438.94	CSS	108.9195	0% Min	2.2	5%	5
CV	14.35087	Std Mean	0.081218			1%	2.3
T:Mean=0	79.14373	Prob> T	0.0001	Range	5.6		
Sgn Rank	4192.5	Prob> S	0.0001	Q3-Q1	0.9		
Num ^= 0	129			Mode	7		
W:Normal	0.721299	Prob<W	0.0				

Extremes

Lowest	ID	Highest	ID
2.2	(K2401 )	7.3	(K2005 )
2.3	(K1502 )	7.3	(K2018 )
3	(K1506 )	7.7	(K4204 )
3.2	(C-87 )	7.8	(K1402 )
3.5	(K4101 )	7.8	(K1603 )

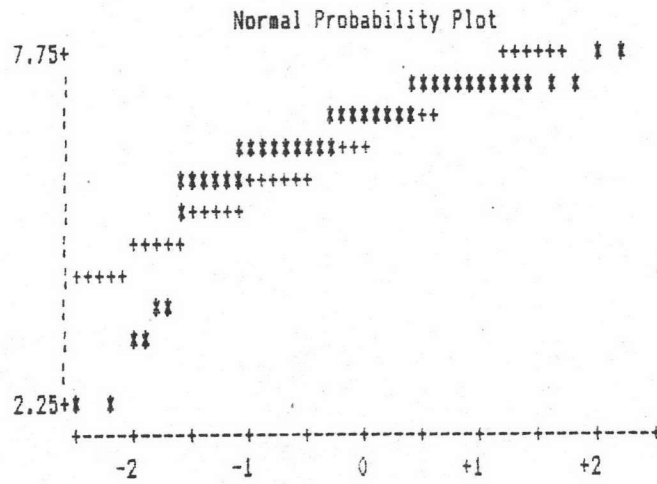


DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

Variable=PIGS

PIGMENT SCUTELLUM



DESCRIPTIVE ANALYSIS OF EASTERN HONEY BEE (THAILAND & MALAYSIAN PENINSULA)

UNIVARIATE PROCEDURE

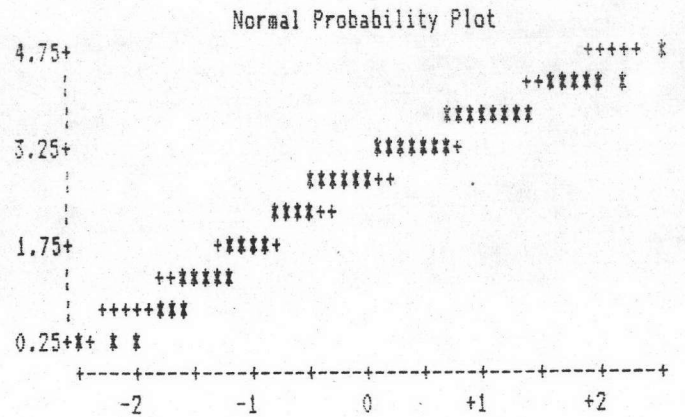
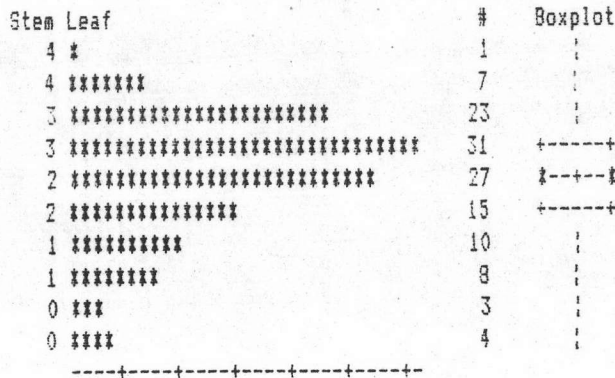
Variable=PIGK PIGMENT SCLERITE K

Moments			
N	129	Sum Wgts	129
Mean	2.731783	Sum	352.4
Std Dev	0.946786	Variance	0.896404
Skewness	-0.68063	Kurtosis	-0.06729
USS	1077.42	CSS	114.7397
CV	34.65817	Std Mean	0.08336
T:Mean=0	32.77096	Prob> T	0.0001
Sgn Rank	4192.5	Prob> S	0.0001
Num ^= 0	129		
W:Normal	0.939766	Prob<W	0.0001

Quantiles(Def=5)			
100% Max	4.6	99%	4.2
75% Q3	3.4	95%	4
50% Med	2.9	90%	3.9
25% Q1	2.1	10%	1.3
0% Min	0.3	5%	0.8
		1%	0.3
Range	4.3		
Q3-Q1	1.3		
Mode	3		

Extremes

Lowest	ID	Highest	ID
0.3	(K2401)	4	(K3204)
0.3	(K1504)	4	(K5004)
0.4	(K1506)	4	(K5110)
0.4	(K1502)	4.2	(K4204)
0.6	(C-94)	4.6	(K1603)









## BIOGRAPHY

Kanok Limbipichai was born in Bangkok, Thailand on March 2, 1962. He graduated from Department of Biology, Faculty of Science, Chulalongkorn University in 1983 and enrolled in the graduate school of Chulalongkorn University in 1985 as a graduate student of Biology and received a grant from Bee Biology Research Unit, Chulalongkorn University to work as a research and teaching assistant.