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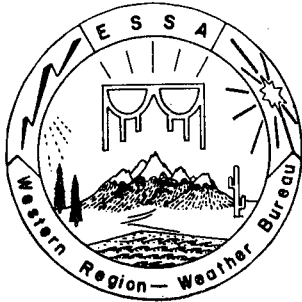
Statistical Report of Aeroallergens (Pollens and Molds) Fort Huachuca, Arizona 1969

WAYNE S. JOHNSON

Western Region

SALT LAKE CITY,
UTAH

April, 1970



WESTERN REGION TECHNICAL MEMORANDA

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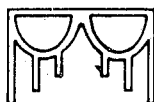
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- No. 26 A Study of Winds in the Lake Mead Recreation Area. R. P. Augulis. January 1968. (PB-177 830)

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A western Indian symbol for rain. It also symbolizes man's dependence on weather and environment in the West.

U. S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
WEATHER BUREAU

Weather Bureau Technical Memorandum WR-50

STATISTICAL REPORT OF AEROALLERGENS
(Pollens and Molds)
FORT HUACHUCA, ARIZONA
1969

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WESTERN REGION
TECHNICAL MEMORANDUM NO. 50

SALT LAKE CITY, UTAH
APRIL 1970

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STATISTICAL REPORT OF AEROALLERGENS
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FOREWORD

The standardized procedures of the Pollen and Mold Committee of the American Academy of Allergy were used in the sampling and counting of the aeroallergens. One by three inch glass microscopic slides were exposed for 24 hours in the Durham Gravity Collector. The air-borne pollen grains and mold spores were identified and counted daily. Counts represent the number of pollens and spores collected per square centimeter of slide area during the 24-hour exposure.

Species are identified where possible, otherwise identification is by genus. For example, slender ragweed is *Franseria tenuifolia*, giant ragweed is *Ambrosia trifida*; mountain cedar is *Juniperus mexicana* but all other species of *Juniperus* are listed as juniper.

The figures shown in the tabulations are the accumulations of the daily counts for the month. The horizontal bars represent the onset, duration and termination of the pollination period by weekly intervals. A similar tabulation of the molds is on page 4. The molds were counted concurrently from the same slides as the pollens but listed separately for convenience.

POLLENS
FORT HUCAHUCA, ARIZONA
1969

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Mountain cedar	63	68							4	3	5	162	305
Cottonwood	21	105	7	3									136
Juniper		29	136	53	1	3							222
Rabbit bush		3	11	31	2	1							47
Pine			3	12	21	41	8						85
Bermuda grass			3	12	55	53	45	222	126	40	9	5	570
Mulberry			9	77									86
Ash			10	32	2								54
English plantain				16	25	15	12	7	3				78
Birch				6									6
Shadscale				10	9	4	2	6					31
Plains lovegrass				3									3
Willow				3									3
Oak				351	129	10	2						492
Walnut				18	19	1							38
Mesquite				10	132	52	14						208
Sycamore				33									33
Douglas fir				8	6								14
Sacaton grass					4								4
Ailanthus					11								11

FIGURE 1

POLLENS
FORT HUACHUCA, ARIZONA
1969

	JAN.	FEB.	MAR.	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL
Desert ragweed	6	.	1	.	.	.	.	.	7
Palo verde	20	.	.	.	.	.	.	.	20
Ocotilla	3	2	.	.	.	.	.	.	5
Johnson grass	4	7	5	37	60	9	.	.	122
Rye grass	3	5	.	.	.	.	.	.	8
Russian thistle	8	1	6	6	4	.	.	25
Privet	3	2	.	.	.	.	.	5
Lamb's-quarters	8	34	4	2	.	.	48
Tamarix	4	5	3	2	1	.	15
Amaranthus	10	122	105	38	5	1	281
Lehmann lovegrass	109	38	9	.	.	156
Sprangletop grass	21	34	.	.	.	55
Gramma grass	14	24	.	.	.	38
Slender ragweed	2	21	22	2	.	47
Giant ragweed	1	14	.	.	15
Sagebrush	16	12	5	4	37
Cocklebur	1	.	.	.	1
Aster	11	10	.	.	21
Desert broom	25	8	2	35
Indian wormwood	6	7	.	13

FIGURE 2

MOLDS
FORT HUACHUCA, ARIZONA
1969

	JAN.	FEB.	MAR.	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL
Alternaria	9	11	15	10	12	10	31	28	25	14	15	25	205
Cladosporium	13	14	2	5	13	2	59	45	54	6	20	50	283
Helminthosporium	9	5	9	7	23	6	15	20	14	7	3	3	121
Smut	50	61	274	46	157	28	61	172	47	47	36	24	1003
Rust	67	71	144	94	101	54	41	61	61	46	740
Pleospora	17	3	7	3	32	14	5	3	8	18	110
Curvularia	1	..	2	1	5	4	..	..	13
Claviceps	3	..	..	..	..	..	..	3
Valsa	33	17	1	..	..	..	51
Fusarium	17	8	1	..	..	..	26
Homobasidiospores	2349	35	18	6	2	1	2411
Stemphyllum	1	..	..	..	2	..	3
Leptosphaeria	2	4	1	3	..	1	11
Sordaria	3	1	..	..	..	4
Chaetomium	7	6	..	1	1	15
Penicillium	27	4	31
Epicoccum	3	2	5
Oidium	2	2	4
Aspergillus	29	29
Other Molds	6	29	9	2	..	2	48

FIGURE 3

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- No. 27 Objective Minimum Temperature Forecasting for Helena, Montana. D. E. Olsen. February 1968. (PB-177 827)
- No. 28** Weather Extremes. R. J. Schmidli. April 1968. (PB-178 928)
- No. 29 Small-Scale Analysis and Prediction. Philip Williams, Jr. May 1968. (PB-178 425)
- No. 30 Numerical Weather Prediction and Synoptic Meteorology. Capt. Thomas D. Murphy, U.S.A.F. May 1968. (AD-673 365)
- No. 31* Precipitation Detection Probabilities by Salt Lake ARTC Radars. Robert K. Belesky. July 1968. (PB-179 084)
- No. 32 Probability Forecasting in the Portland Fire-Weather District. Harold S. Ayer. July 1968. (PB-179 289)
- No. 33 Objective Forecasting. Philip Williams, Jr. August 1968. (AD-680 425)
- No. 34 The WSR-57 Radar Program at Missoula, Montana. R. Granger. October 1968. (PB-180 292)
- No. 35* Joint ESSA/FAA ARTC Radar Weather Surveillance Program. Herbert P. Benner and DeVon B. Smith. December 1968. (AD-681 857)
- No. 36* Temperature Trends in Sacramento--Another Heat Island. Anthony D. Lentini. February 1969. (PB-183 055)
- No. 37 Disposal of Logging Residues Without Damage to Air Quality. Owen P. Cramer. March 1969. (PB-183 057)
- No. 38 Climate of Phoenix, Arizona. R. J. Schmidli, P. C. Kangieser, and R. S. Ingram. April 1969. (PB-184 295)
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- No. 41 High Resolution Radiosonde Observations. W. W. Johnson. August 1969. (PB-185 673)
- No. 42 Analysis of the Southern California Santa Ana of January 15 - 17, 1966. Barry B. Aronovitch. August 1969. (PB-185 670)
- No. 43 Forecasting Maximum Temperatures at Helena, Montana. David E. Olsen. October 1969.
- No. 44 Estimated Return Periods for Short-Duration Precipitation in Arizona. Paul C. Kangieser. October 1969. (PB-187 763)
- No. 45/1 Precipitation Probabilities in the Western Region Associated with Winter 500-mb Map Types. Richard P. Augulis. December 1969. (PB-188 248)
- No. 45/2 Precipitation Probabilities in the Western Region Associated with Spring 500-mb Map Types. Richard P. Augulis. January 1970. (PB-189 434)
- No. 45/3 Precipitation Probabilities in the Western Region Associated with Summer 500-mb Map Types. Richard P. Augulis. January 1970. (PB-189 414)
- No. 45/4 Precipitation Probabilities in the Western Region Associated with Fall 500-mb Map Types. Richard P. Augulis. January 1970. (PB-189 435)
- No. 46 Applications of the Net Radiometer to Short-Range Fog and Stratus Forecasting at Eugene, Oregon. L. Yee and E. Bates. December 1969. (PB-190 476)
- No. 47 Statistical Analysis as a Flood Routing Tool. Robert J. C. Burnash. December 1969. (PB-188 744)
- No. 48 Tsunami. Richard P. Augulis. February 1970. (PB-190 157)
- No. 49 Predicting Precipitation Type. Robert J. C. Burnash and Floyd E. Hug. March 1970.

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