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U.S. DEPARTMENT OF COMMERCE  
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION  
Weather Bureau

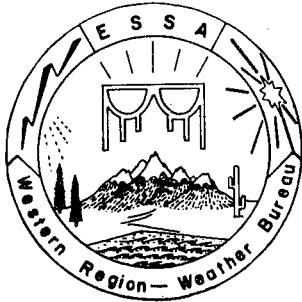
## Statistical Report of Aeroallergens (Pollens and Molds) Fort Huachuca, Arizona 1969

WAYNE S. JOHNSON

Western Region

SALT LAKE CITY,  
UTAH

April, 1970



WESTERN REGION TECHNICAL MEMORANDA

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- No. 6 Improvement of Forecast Wording and Format. C. L. Glenn. May 1966.
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- No. 8 Interpreting the RAREP. Herbert P. Benner. May 1966. (Revised January 1967.)
- No. 9 A Collection of Papers Related to the 1966 NMC Primitive-Equation Model. June 1966.
- No. 10\* Sonic Boom. Loren Crow (6th Weather Wing, USAF, Pamphlet). June 1966. (AD-479 366)
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- No. 16 Some Notes on Acclimatization in Man. Edited by Leonard W. Snellman. November 1966.
- No. 17 A Digitalized Summary of Radar Echoes Within 100 Miles of Sacramento, California. J. A. Youngberg and L. B. Overaas. December 1966.
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- No. 20 Transmitting Radar Echo Locations to Local Fire Control Agencies for Lightning Fire Detection. Robert R. Peterson. March 1967.
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- No. 25 Verification of Operational Probability of Precipitation Forecasts, April 1966 - March 1967. W. W. Dickey. October 1967. (PB-176 240)
- No. 26 A Study of Winds in the Lake Mead Recreation Area. R. P. Augulis. January 1968. (PB-177 830)

\*Out of Print  
\*\*Revised



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  
(Pollens and Molds)  
FORT HUACHUCA, ARIZONA  
1969

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



Western Region Technical Memoranda: (Continued)

- 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)
- No. 39 Upper-Air Lows Over Northwestern United States. A. L. Jacobson. April 1969. (PB-184 296)
- No. 40 The Man-Machine Mix in Applied Weather Forecasting in the 1970s. L. W. Snellman. August 1969. (PB-185 068)
- 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.

\*Out of Print

\*Revised