

---

# **COMMERCIAL FERTILIZERS**

## **CONSUMPTION BY CLASS FOR YEAR ENDED JUNE 30, 1981**



Crop  
Reporting  
Board

Statistical Reporting  
Service

U.S. Department  
of Agriculture

Washington, D.C.  
20250

December 1981  
SpCr 7(81)

## C O N T E N T S

<u>TABLE</u>		<u>PAGE</u>
1	Fertilizer Consumption by Class, 1967-1981	4
2	Fluid Fertilizers Average Primary Nutrient Content, 1967-1981	4
3	Mixed Fertilizer Consumption by Class, 1980	6
4	Mixed Fertilizer Consumption by Class, 1981	7
5	Direct Application Materials Consumption by Class, 1980	8
6	Direct Application Materials Consumption by Class, 1981	9
7	Consumption of Fertilizer Mixtures and Direct Application Materials by Class, 1980	10
8	Consumption of Fertilizer Mixtures and Direct Application Materials by Class, 1981	11
9	Average Primary Nutrient Content of Fluid Fertilizer, 1980	12
10	Average Primary Nutrient Content of Fluid Fertilizer, 1981	13
11	U S Consumption of Fertilizers and Plant Nutrients, 1960-1981	14

For Information Call: (202) 447-7621

CONSUMPTION OF COMMERCIAL FERTILIZER BY CLASS  
1979-80

FERTILIZER CONSUMPTION UP 1 PERCENT

Consumption of fertilizer containing one or more primary nutrients totaled 51.2 million tons in the United States and Puerto Rico during the year ending June 30, 1981, an increase of 1 percent from the 50.5 million tons consumed during the 1980 fertilizer year. The total tonnage consisted of 12 percent dry bagged, 51 percent dry bulk and 37 percent fluid. The breakdown for the previous year was 13 percent dry bagged, 51 percent dry bulk and 36 percent fluid.

This fertilizer consumption by class report represents all commercial fertilizer tonnage containing one or more primary nutrients sold or shipped for farm and non-farm use as fertilizer in the United States and Puerto Rico. Materials used in the manufacture of registered mixes are not shown separately as materials. Uses other than fertilizer are not included.

DRY BAGGED FERTILIZER CONTINUES TO DECLINE

During the 1980-81 fertilizer year, dry bagged tonnage at 6.2 million tons decreased 9 percent and accounted for 12 percent of total consumption. Mixed fertilizer in bags totaled 4.7 million tons, down 8 percent and accounted for 20 percent of all mixed fertilizer. Direct-application materials in bags at 1.5 million tons were down 10 percent for all primary nutrient direct-application materials.

BULK FERTILIZER USAGE UP 2 PERCENT

Dry bulk fertilizer mixtures and dry bulk direct-application materials used totaled 26.3 million tons for the 1980-81 fertilizer year, 2 percent more than the previous year. Mixed fertilizer in dry bulk form at 13.8 million tons was up 2 percent and accounted for 59 percent of the total primary nutrient mixtures. Direct-application materials in dry bulk form increased 2 percent to 12.6 million tons and comprised 45 percent of all direct-application materials.

FLUID FERTILIZER USAGE INCREASES 5 PERCENT

Fluid fertilizer (liquid, gases, and suspensions) totaled 18.7 million tons, an increase of 5 percent from the previous year. Consumption of fluid mixtures containing two or more primary nutrients increased 6 percent to 4.9 million tons and represents 21 percent of total mixed fertilizer. The average analysis of fluid mixtures was 9.0 percent nitrogen, 16.0 percent phosphate, and 10.2 percent potash. The analysis for the previous year was 8.6-16.3-10.1.

Fluid direct-application materials at 13.8 million tons increased 4 percent and accounted for 50 percent of all direct-application material tonnage. Fluid materials include anhydrous ammonia, aqua ammonia, nitrogen, phosphoric and potassic solutions and other miscellaneous primary nutrient materials applied directly to the soil in fluid form. The average nutrient content of fluid materials consumed in the 1981 fertilizer year was 49.7 percent nitrogen, 0.5 percent phosphate and 0.1 percent potash compared with 49.9-0.5-0.1 in the previous year.

DATA SOURCES

This report, compiled by the Crop Reporting Board of the Statistics Reporting Service, is based on fertilizer tonnage reports prepared by State Fertilizer Control Officials and the voluntary responses of more than 1500 fertilizer manufacturers, blenders, and sales outlets.

TABLE 1. FERTILIZER CONSUMPTION BY CLASS 1/  
1967-1980

YEAR ENDED JUNE 30	MIXTURES			MATERIALS			TOTAL CONSUMPTION 2/				
	DRY BAGGED	DRY BULK	FLUID	DRY BAGGED	DRY BULK	FLUID	DRY BAGGED	DRY BULK	FLUID	TOTAL	
	1,000 TONS										
1967	12,088.4	7,145.2	1,828.0	3,400.8	5,014.2	5,848.1	15,489.2	12,159.4	7,676.1	35,325.0	
1968	10,827.6	8,214.1	1,988.9	3,072.5	6,099.3	6,567.7	13,900.1	14,313.4	8,556.6	36,769.9	
1969	9,934.9	8,798.9	2,249.1	3,208.9	6,399.6	6,687.6	13,143.8	15,198.5	8,936.7	37,279.0	
1970	9,202.6	8,974.3	2,540.5	2,943.6	6,848.1	7,436.7	12,146.3	15,822.4	9,977.2	37,945.7	
1971	8,680.1	9,663.3	2,937.7	2,819.9	7,268.4	8,194.1	11,500.0	16,931.7	11,131.8	39,563.0	
1972	8,476.1	9,779.9	3,040.0	2,765.9	7,683.8	7,799.7	11,242.0	17,463.7	10,839.7	39,545.3	
1973 3/	7,937.0	11,416.3	3,194.2	2,607.7	8,737.4	7,929.9	10,544.8	20,153.6	11,124.0	41,822.4	
1974 3/	8,063.2	12,547.7	3,456.5	2,419.2	9,289.0	9,188.8	10,482.4	21,836.7	12,645.3	44,964.4	
1975 3/	6,917.8	10,561.2	3,168.4	2,126.3	8,811.4	9,020.9	9,044.1	19,372.6	21,189.3	40,605.9	
1976 3/	6,613.8	12,709.6	3,635.3	1,914.7	10,700.1	11,293.0	8,555.8	23,409.6	14,927.8	46,893.0	
1977 3/	6,369.5	13,728.7	4,001.2	1,894.6	11,425.4	11,679.3	8,264.1	25,154.0	15,680.4	49,098.6	
1978 3/	5,735.7	12,442.0	3,932.2	1,755.4	10,981.7	10,773.9	7,491.1	23,423.9	14,706.1	45,621.1	
1979 3/	5,351.6	13,916.0	4,474.5	1,821.0	11,924.5	11,853.2	7,173.5	25,840.5	16,327.7	49,341.7	
1980 3/	5,126.3	13,534.9	4,609.0	1,628.8	12,355.7	13,238.2	6,753.1	25,890.8	17,847.2	50,490.9	
1981 3/	4,706.1	13,750.6	4,883.3	1,470.5	12,587.0	13,796.0	6,176.4	26,337.8	18,679.3	51,193.5	

1/ EXCLUDES SECONDARY AND MICRONUTRIENT MATERIALS.

2/ SUM OF INDIVIDUAL ITEMS MAY NOT EQUAL TOTAL DUE TO ROUNDING.

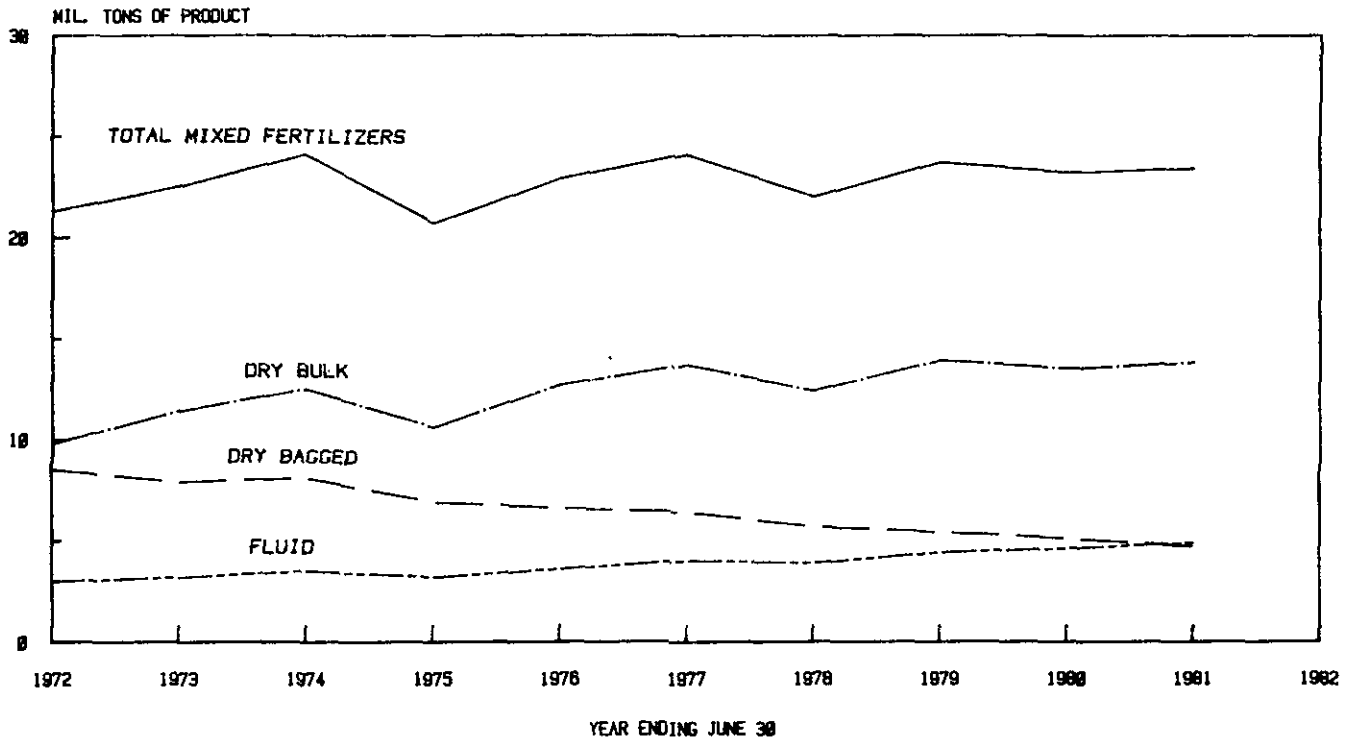
3/ INCLUDES TONNAGES FOR ALAS, HAW AND P R.

TABLE 2. FLUID FERTILIZERS AVERAGE PRIMARY NUTRIENT CONTENT  
1967-80

YEAR ENDED JUNE 30	FLUID MIXTURES				FLUID MATERIALS				
	N	AVAILABLE P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	TOTAL	N	AVAILABLE P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	TOTAL	
	PERCENT								
1967	7.5	16.2	6.1	29.8	50.1	0.5	0	50.6	
1968	7.1	16.0	7.0	30.1	52.6	0.1	0	52.7	
1969	7.8	16.3	7.1	31.2	53.1	0.7	0	53.8	
1970	8.4	16.4	7.6	32.4	53.2	0.5	0	53.7	
1971	8.1	15.9	8.3	32.0	54.1	0.4	0	54.5	
1972	8.5	16.1	8.4	33.0	53.0	0.4	0	53.4	
1973 1/	8.7	15.6	8.5	32.8	51.2	0.4	0	51.6	
1974 1/	8.6	14.7	9.2	32.5	52.6	0.2	0	52.8	
1975 1/	8.6	14.8	8.9	32.3	51.7	0.2	0.1	52.0	
1976 1/	9.1	15.5	9.4	34.0	50.9	0.2	0.1	51.2	
1977 1/	8.9	15.3	9.6	33.8	50.8	0.2	0.1	51.1	
1978 1/	8.8	16.2	9.6	34.6	49.8	0.2	0	50.0	
1979 1/	8.5	16.3	9.6	34.4	50.2	0.3	0.1	50.6	
1980 1/	8.6	16.3	10.1	35.0	49.9	0.5	0.1	50.5	
1981 1/	9.0	16.0	10.2	35.2	49.7	0.5	0.1	50.3	

1/ INCLUDES ALAS, HAW AND P R.

## CONSUMPTION OF MIXED FERTILIZERS



## CONSUMPTION OF DIRECT APPLICATION MATERIALS

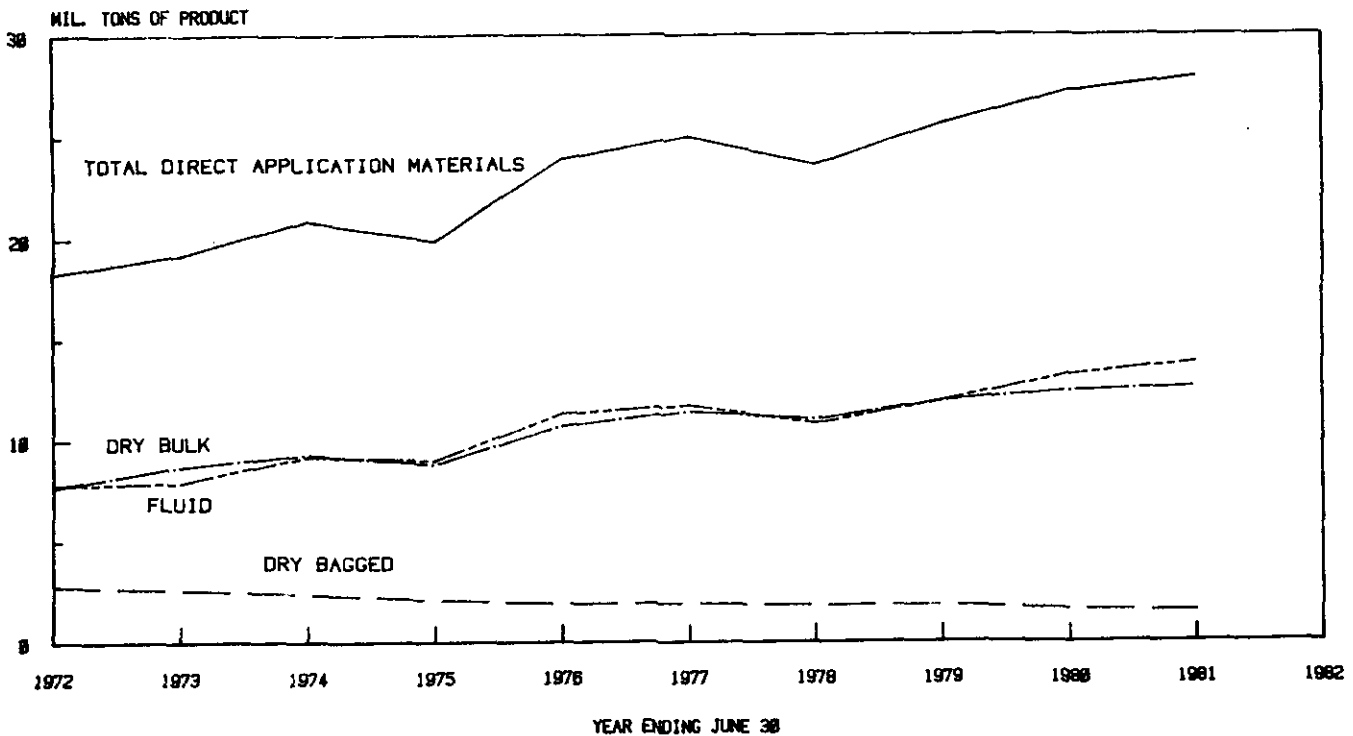


TABLE 3 -- MIXED FERTILIZER CONSUMPTION BY CLASS,  
YEAR ENDED JUNE 30, 1940

STATE	MIXTURES				PERCENT OF TOTAL MIXTURES 2/		
	DRY BAGGED	DRY BULK	FLUID	TOTAL 1/	DRY BAGGED	DRY BULK	FLUID
	1,000 TONS				PERCENT		
ALA	148.5	401.6	84.4	634.4	23	63	13
ALAS	3.8	2.7	0.0	6.4	59	41	0
ARIZ	9.0	32.9	21.1	63.0	14	52	33
ARK	33.8	304.4	52.6	390.8	9	78	13
CALIF	113.5	400.4	195.3	712.2	16	56	28
COLO	3.1	37.7	19.6	60.4	5	62	33
CONN	24.2	14.2	1.9	40.4	60	35	5
DEL	20.5	55.6	9.4	85.5	24	65	11
D C	8.6	0.6	0.5	9.7	89	6	5
FLA	353.5	1,282.1	125.7	1,761.3	20	73	7
GA	201.2	790.5	246.5	1,238.3	16	64	20
HAW	27.1	30.5	51.0	108.6	25	28	47
IDAHO	10.6	96.8	10.6	118.1	9	82	9
ILL	57.4	832.1	545.2	1,434.7	4	58	38
IND	202.8	773.3	459.7	1,435.8	14	54	32
IOWA	135.0	754.7	349.8	1,239.5	11	61	28
KANS	83.2	269.0	137.0	489.2	17	55	28
KY	242.2	255.6	23.5	521.3	46	49	5
LA	88.4	320.5	197.4	606.3	15	53	33
MAINE	16.7	75.2	0.9	92.8	18	81	1
MD	94.3	157.2	47.9	299.4	31	53	16
MASS	41.3	6.6	2.5	50.4	82	13	5
MICH	234.3	368.2	66.9	669.4	35	55	10
MINN	63.7	524.0	157.3	744.9	9	70	21
MISS	88.6	286.4	7.7	382.7	23	75	2
MO	93.6	1,166.7	190.6	1,450.9	6	80	13
MONT	1.2	107.9	7.0	116.1	1	93	6
NEBR	26.5	207.9	207.9	442.4	6	47	47
NEV	1.6	2.9	.8	5.2	30	55	15
N H	14.9	3.9	1.0	19.9	75	20	5
N J	80.2	65.1	16.0	161.4	50	40	10
N MEX	7.8	20.2	4.5	32.5	24	62	14
N Y	171.0	213.6	46.1	430.7	40	50	11
N C	680.5	413.4	169.4	1,263.3	54	33	13
N DAK	13.1	207.1	41.9	262.2	5	79	16
OHIO	241.0	564.1	218.5	1,023.6	24	55	21
OKLA	57.0	226.2	22.4	305.6	19	74	7
OREG	27.7	63.6	19.7	111.1	25	57	18
PA	268.0	125.1	24.4	417.5	64	30	6
R I	7.5	2.3	1.7	11.6	65	20	15
S C	165.9	328.2	61.2	556.3	30	59	11
S DAK	5.8	108.5	32.7	147.0	4	74	22
TENN	209.3	188.8	12.3	410.4	51	46	3
TEX	297.6	796.4	472.2	1,566.2	19	51	30
UTAH	1.2	12.3	1.3	14.9	8	83	9
VT	22.9	11.1	4.2	38.1	60	29	11
VA	165.5	238.6	145.0	549.2	30	43	26
WASH	14.6	109.8	22.0	146.4	10	75	15
W VA	26.9	7.7	0.4	35.0	77	22	1
WISC	115.4	254.7	67.5	437.5	26	54	15
WYO	0.9	4.7	0.6	6.2	14	76	9
P R	102.4	11.4	0.0	113.8	90	10	0
TOTAL 1/	5,126.3	13,534.9	4,609.0	23,270.2	22	58	20

1/ SUM OF INDIVIDUAL ITEMS MAY NOT EQUAL TOTAL DUE TO ROUNDING.

2/ SUM OF PERCENTS MAY NOT EQUAL 100 DUE TO ROUNDING.

TABLE 4 -- MIXED FERTILIZER CONSUMPTION BY CLASS,  
YEAR ENDED JUNE 30, 1981

STATE	MIXTURES				PERCENT OF TOTAL MIXTURES 2/		
	DRY BAGGED	DRY BULK	FLUID	TOTAL 1/	DRY BAGGED	DRY BULK	FLUID
	1,000 TONS				PERCENT		
ALA	137.9	390.7	72.5	601.1	23	65	12
ALAS	3.0	2.1	0.0	5.0	59	41	0
ARIZ	8.0	36.3	17.4	61.6	13	59	28
ARK	25.8	295.6	48.0	369.4	7	80	13
CALIF	126.3	371.5	220.1	717.9	18	52	31
COLO	4.2	16.3	21.4	41.9	10	39	51
CONN	20.1	18.2	1.9	40.2	50	45	5
DEL	23.6	64.0	10.8	98.4	24	65	11
D C	1.9	0.1	0.1	2.1	89	6	5
FLA	352.4	1,216.4	149.4	1,718.1	21	71	9
GA	192.1	785.5	250.1	1,227.7	16	64	20
HAW	25.3	28.4	48.8	102.5	25	28	48
IDAHO	5.8	83.9	7.4	97.1	6	86	8
ILL	49.8	847.7	481.7	1,379.2	4	61	35
IND	162.2	733.1	433.6	1,329.1	12	55	33
IOWA	97.4	794.9	415.2	1,307.5	7	61	32
KANS	76.2	249.5	135.1	460.8	17	54	29
KY	248.1	272.8	15.4	536.3	46	51	3
LA	88.4	320.5	197.4	606.3	15	53	33
MAINE	15.9	71.2	0.9	88.0	18	81	1
MD	87.6	189.7	52.8	330.1	27	57	16
MASS	38.9	16.4	2.5	57.8	67	28	4
MICH	154.5	463.5	59.9	677.9	23	68	9
MINN	55.1	555.6	176.9	787.7	7	71	22
MISS	114.2	308.2	12.6	437.0	27	71	3
MO	89.4	1,058.3	237.6	1,385.3	6	76	17
MONT	0.6	123.7	9.2	133.4	0	93	7
NEBR	17.7	243.4	238.7	499.8	4	49	48
NEV	1.8	3.4	.9	6.1	30	55	15
N H	16.8	3.2	0.3	20.3	83	16	2
N J	80.9	63.7	16.4	160.9	50	40	10
N MEX	4.6	27.0	3.7	35.3	13	76	10
N Y	174.6	218.1	47.5	440.3	40	50	11
N C	652.5	431.6	194.3	1,278.4	51	34	15
N DAK	10.9	223.3	30.1	264.3	4	84	11
OHIO	232.5	580.9	226.9	1,040.3	22	56	22
OKLA	50.7	233.8	19.4	303.9	17	77	6
OREG	19.8	66.2	13.0	99.0	20	67	13
PA	244.5	146.3	37.6	428.4	57	34	9
R I	5.3	1.8	1.1	8.3	64	22	14
S C	161.4	335.6	65.3	562.2	29	60	12
S DAK	5.6	124.5	32.0	162.1	3	77	20
TENN	225.7	194.9	11.2	431.8	52	45	3
TEX	217.1	983.6	610.9	1,711.6	13	52	36
UTAH	0.5	2.4	1.9	4.8	11	50	39
VT	22.7	13.8	7.8	44.3	51	31	18
VA	164.9	259.5	140.3	564.7	29	46	25
WASH	14.1	124.4	32.6	171.1	8	73	19
W VA	28.9	8.6	0.7	38.3	76	23	2
WISC	79.1	231.5	70.1	380.8	21	61	18
WYO	1.3	7.5	1.7	10.5	12	71	16
P R	65.7	7.7	0.0	73.5	89	11	0
TOTAL 1/	4,706.1	13,750.6	4,883.3	23,340.0	20	59	21

1/ SUM OF INDIVIDUAL ITEMS MAY NOT EQUAL TOTAL DUE TO ROUNDING.  
2/ SUM OF PERCENTS MAY NOT EQUAL 100 DUE TO ROUNDING.

TABLE 5 -- DIRECT-APPLICATION MATERIALS CONSUMPTION BY CLASS,  
YEAR ENDED JUNE 30, 1980 1/

STATE	MATERIALS				PERCENT OF TOTAL MATERIALS 3/		
	DRY BAGGED	DRY BULK	FLUID	TOTAL 2/	DRY BAGGED	DRY BULK	FLUID
	1,000 TONS				PERCENT		
ALA	81.7	166.8	91.9	340.4	24	49	27
ALAS	0.5	1.7	0.0	2.2	23	77	0
ARIZ	13.4	72.6	194.6	280.6	5	26	69
ARK	30.8	285.5	53.2	369.5	8	77	14
CALIF	210.1	706.6	1,184.5	2,101.2	10	34	56
COLO	14.5	192.6	217.2	424.2	3	45	51
CONN	9.4	7.0	0.7	17.1	55	41	4
DEL	1.2	26.2	38.8	66.1	2	40	59
D C	1.0	0.2	0.1	1.3	80	12	8
FLA	48.4	175.1	84.9	308.4	16	57	28
GA	101.9	189.2	436.7	727.8	14	26	60
HAW	8.8	17.0	32.7	58.5	15	29	56
IDAHO	13.3	275.8	153.4	442.5	3	62	35
ILL	39.8	1,627.1	1,392.4	3,059.3	1	53	46
IND	15.5	646.2	765.4	1,427.0	1	45	54
IOWA	26.9	1,280.6	1,317.3	2,624.8	1	49	50
KANS	22.7	329.5	784.8	1,137.0	2	29	69
KY	62.5	345.1	108.4	516.0	12	67	21
LA	19.3	135.3	72.5	227.1	9	60	32
MAINE	5.7	2.8	0.1	8.5	66	32	1
MD	5.8	46.6	93.3	145.7	4	32	64
MASS	9.9	5.0	0.3	15.2	65	33	2
MICH	119.5	244.9	232.9	597.3	20	41	39
MINN	62.2	871.4	622.4	1,556.1	4	56	40
MISS	98.4	174.9	89.0	362.3	27	48	25
MO	22.9	187.2	270.1	480.2	5	39	56
MONT	1.6	135.9	21.0	158.4	1	86	13
NEBR	15.5	340.8	1,192.8	1,549.1	1	22	77
NEV	1.7	10.4	5.2	17.3	10	60	30
N H	3.9	1.2	0.7	5.7	68	20	11
N J	16.5	11.3	6.5	34.3	48	33	19
N MEX	7.5	21.2	43.8	72.5	10	29	60
N Y	32.2	111.9	86.9	231.0	14	48	38
N C	111.8	45.1	403.3	560.2	20	8	72
N DAK	5.1	166.6	337.3	508.9	1	33	66
OHIO	53.6	746.6	539.8	1,339.9	4	56	40
OKLA	11.0	246.7	305.2	562.9	2	44	54
OREG	32.0	299.2	142.0	473.2	7	63	30
PA	23.3	69.4	65.6	158.3	15	44	41
R I	0.9	1.1	0.0	2.1	45	55	0
S C	34.5	42.3	179.0	255.8	14	17	70
S DAK	2.7	170.7	93.3	266.7	1	64	35
TENN	59.8	244.7	58.5	363.0	16	67	16
TEX	50.2	561.7	640.5	1,252.4	4	45	51
UTAH	3.3	98.1	10.0	111.5	3	88	9
VT	2.9	5.0	5.3	13.2	22	38	40
VA	22.4	23.1	145.2	190.6	12	12	76
WASH	70.8	233.6	403.5	708.0	10	33	57
W VA	5.5	29.0	5.3	39.8	14	73	13
WISC	9.8	692.7	280.3	982.8	1	70	29
WYO	1.3	34.6	28.0	63.9	2	54	44
P R	0.8	0.3	1.9	3.0	27	10	63
TOTAL 2/	1,626.8	12,355.7	13,238.2	27,220.7	6	45	49

1/ EXCLUDES SECONDARY AND MICRONUTRIENT MATERIALS.

2/ SUM OF INDIVIDUAL ITEMS MAY NOT EQUAL TOTAL DUE TO ROUNDING.

3/ SUM OF PERCENTS MAY NOT EQUAL 100 DUE TO ROUNDING.



TABLE 6 -- DIRECT-APPLICATION MATERIALS CONSUMPTION BY CLASS,  
YEAR ENDED JUNE 30, 1981 1/

STATE	MATERIALS				PERCENT OF TOTAL MATERIALS 3/		
	DRY BAGGED	DRY BULK	FLUID	TOTAL 2/	DRY BAGGED	DRY BULK	FLUID
	1,000 TONS				PERCENT		
ALA	87.7	171.6	108.5	367.9	24	47	29
ALAS	1.5	2.6	0.0	4.1	36	64	0
ARIZ	8.0	71.5	204.9	284.4	3	25	72
ARK	28.0	383.8	99.2	511.0	5	75	19
CALIF	203.5	657.8	1,124.7	1,985.9	10	33	57
COLO	11.1	223.9	204.8	439.8	3	51	47
CONN	8.0	8.6	0.6	17.2	46	50	3
DEL	2.0	24.5	45.4	72.0	3	34	63
D C	0.1	0.0	0.0	0.1	75	7	17
FLA	37.0	179.5	101.8	318.3	12	56	32
GA	104.0	183.6	509.3	796.9	13	23	64
HAW	7.0	12.9	27.0	46.9	15	27	58
IDAHO	9.4	290.3	171.0	470.7	2	62	36
ILL	11.7	1,547.1	1,318.4	2,877.2	0	54	46
IND	15.4	614.9	752.5	1,382.8	1	44	54
IOWA	24.4	1,200.2	1,465.4	2,690.0	1	45	54
KANS	28.0	347.4	754.4	1,129.7	2	31	67
KY	77.9	426.9	112.9	617.7	13	69	18
LA	19.3	135.3	72.5	227.1	9	60	32
MAINE	9.5	3.0	0.5	12.9	74	23	3
MD	4.5	61.4	84.2	150.1	3	41	56
MASS	7.0	3.3	0.2	10.5	67	32	2
MICH	102.4	307.1	242.1	651.6	16	47	37
MINN	50.1	958.2	676.1	1,684.4	3	57	40
MISS	109.2	207.4	129.0	444.5	24	47	29
MO	15.1	299.4	262.0	576.5	3	52	45
MONT	0.6	158.1	42.9	201.6	0	78	21
NEBR	3.9	332.6	1,115.7	1,452.3	0	23	77
NEV	.8	9.2	6.1	16.1	5	57	38
N H	3.1	0.8	0.4	4.3	72	18	10
N J	16.5	10.8	8.1	35.4	47	30	23
N MEX	4.9	23.1	39.4	67.4	7	34	58
N Y	35.6	94.2	76.1	205.9	17	46	37
N C	86.4	50.8	472.1	609.3	14	6	77
N DAK	2.4	136.0	324.0	462.5	1	29	70
OHIO	37.0	712.3	631.1	1,380.4	3	52	46
OKLA	9.5	273.1	282.7	565.3	2	48	50
OREG	29.5	302.9	145.3	477.7	6	63	30
PA	25.1	73.1	69.1	167.4	15	44	41
R I	0.9	1.2	0.0	2.1	42	58	0
S C	35.0	42.2	224.8	301.9	12	14	74
S DAK	2.2	188.4	121.8	312.6	1	60	39
TENN	74.6	316.2	60.5	451.3	17	70	13
TEX	36.7	523.3	683.4	1,243.5	3	42	55
UTAH	0.0	2.2	35.7	37.9	0	6	94
VT	2.6	6.1	3.7	12.4	21	49	30
VA	24.1	25.7	163.8	213.7	11	12	77
WASH	32.1	269.8	484.2	786.2	4	34	62
W VA	4.1	16.6	18.6	39.2	10	42	47
WISC	18.3	633.7	272.1	924.1	2	69	29
WYO	2.7	61.8	45.7	110.1	2	56	41
P R	1.2	.6	1.2	3.0	40	20	40
TOTAL 2/	1,470.5	12,587.0	13,796.0	27,853.5	5	45	50

1/ EXCLUDES SECONDARY AND MICRONUTRIENT MATERIALS.  
2/ SUM OF INDIVIDUAL ITEMS MAY NOT EQUAL TOTAL DUE TO ROUNDING.  
3/ SUM OF PERCENTS MAY NOT EQUAL 100 DUE TO ROUNDING.

TABLE 7 -- CONSUMPTION OF FERTILIZER MIXTURES AND DIRECT-APPLICATION MATERIALS, BY CLASS, YEAR ENDED JUNE 30, 1980 1/

STATE	MIXTURES AND MATERIALS				PERCENT OF TOTAL FERTILIZER 3/		
	DRY BAGGED	DRY BULK	FLUID	TOTAL 2/	DRY BAGGED	DRY BULK	FLUID
	1,000 TONS				PERCENT		
ALA	230.2	568.3	176.3	974.8	24	58	18
ALAS	4.3	4.4	0.0	8.6	50	51	0
ARIZ	22.4	105.5	215.6	343.5	7	31	63
ARK	64.6	589.9	105.0	760.3	8	78	14
CALIF	323.6	1,106.9	1,382.0	2,813.4	12	39	49
COLO	17.6	230.3	236.0	484.6	4	48	49
CONN	33.6	21.2	2.7	57.5	58	37	5
DEL	21.7	81.8	40.1	151.6	14	54	32
D C	9.6	0.8	0.6	11.0	88	7	5
FLA	401.9	1,457.2	210.6	2,069.7	19	70	10
GA	303.1	979.7	683.2	1,966.1	15	50	35
HAW	35.9	47.5	83.7	167.1	22	28	50
IDAHO	23.9	372.6	164.0	560.6	4	66	29
ILL	97.2	2,459.2	1,937.6	4,493.9	2	55	43
IND	218.3	1,419.5	1,225.0	2,862.8	8	50	43
IOWA	161.9	2,035.4	1,667.0	3,864.3	4	53	43
KANS	105.9	598.5	921.8	1,626.2	7	37	57
KY	304.7	600.7	132.0	1,037.3	29	58	13
LA	107.7	455.8	269.9	833.4	13	55	32
MAINE	22.4	77.9	1.0	101.3	22	77	1
MD	100.1	203.9	141.2	445.2	22	46	32
MASS	51.2	11.6	2.8	65.6	78	18	4
MICH	353.8	613.1	299.8	1,266.6	28	48	24
MINN	125.9	1,395.4	779.7	2,301.0	5	61	34
MISS	187.0	461.3	96.7	745.0	25	62	13
MO	116.5	1,353.8	460.8	1,931.1	6	70	24
MONT	2.8	243.8	28.0	274.5	1	89	10
NEBR	42.0	548.7	1,400.7	1,991.4	2	26	70
NEV	3.3	13.3	6.0	22.5	15	59	27
N H	18.8	5.1	1.7	25.6	73	20	7
N J	96.8	76.4	22.5	195.6	49	39	12
N MEX	15.3	41.4	48.3	105.0	15	39	46
N Y	203.2	325.5	133.1	661.8	31	49	20
N C	792.3	458.4	572.7	1,823.5	43	25	31
N DAK	18.2	373.7	379.2	771.1	2	48	49
OHIO	294.6	1,310.7	758.3	2,363.6	12	55	32
OKLA	68.0	472.8	327.6	868.4	8	54	38
OREG	59.7	362.8	161.7	584.3	10	62	28
PA	291.3	194.5	90.0	575.8	51	34	16
R I	8.5	3.5	1.7	13.7	62	25	13
S C	201.4	370.5	240.2	812.1	25	46	30
S DAK	8.5	279.2	126.0	413.7	2	67	30
TENN	269.1	433.5	70.8	773.4	35	56	9
TEX	347.8	1,358.0	1,112.7	2,818.6	12	48	39
UTAH	4.5	110.5	11.3	126.3	4	87	9
VT	25.8	16.1	9.5	51.3	50	31	18
VA	187.9	261.7	290.2	739.8	25	35	39
WASH	85.4	343.5	425.5	854.4	10	40	50
W VA	32.4	36.7	5.7	74.7	43	49	8
WISC	125.2	947.4	347.8	1,420.3	9	67	24
WYO	2.2	39.3	28.6	70.1	3	56	41
P R	103.2	11.7	1.9	116.8	88	10	2
TOTAL 2/	6,753.1	25,890.8	17,847.2	50,490.9	13	51	36

1/ EXCLUDES SECONDARY AND MICRONUTRIENT MATERIALS.

2/ SUM OF INDIVIDUAL ITEMS MAY NOT EQUAL TOTAL DUE TO ROUNDING.

3/ SUM OF PERCENTS MAY NOT EQUAL 100 DUE TO ROUNDING.

TABLE 8 -- CONSUMPTION OF FERTILIZER MIXTURES AND DIRECT-APPLICATION MATERIALS,  
BY CLASS, YEAR ENDED JUNE 30, 1981 1/

STATE	MIXTURES AND MATERIALS				PERCENT OF TOTAL FERTILIZER 3/		
	DRY BAGGED	DRY BULK	FLUID	TOTAL 2/	DRY BAGGED	DRY BULK	FLUID
	1,000 TONS				PERCENT		
ALA	225.6	562.3	181.0	958.9	23	58	19
ALAS	4.4	4.7	0.0	9.1	49	51	0
ARIZ	16.0	107.8	222.3	346.0	5	31	64
ARK	53.8	679.4	147.2	880.4	6	77	17
CALIF	329.8	1,029.2	1,344.8	2,703.8	12	38	50
COLO	15.3	240.2	226.2	481.7	3	50	47
CONN	28.1	26.8	2.5	57.4	49	47	4
DEL	25.6	88.5	56.2	170.4	15	52	33
D C	2.0	0.1	0.1	2.2	89	6	6
FLA	389.4	1,395.8	251.3	2,036.5	19	69	12
GA	296.1	969.1	759.4	2,024.6	15	48	38
HAW	32.3	41.3	75.8	149.4	22	28	51
IDAHO	15.2	374.2	178.4	567.8	3	66	31
ILL	61.5	2,394.8	1,800.0	4,256.4	1	54	42
IND	177.6	1,348.0	1,186.2	2,711.9	7	50	44
IOWA	121.8	1,995.1	1,880.6	3,997.5	3	50	47
KANS	104.2	596.9	889.5	1,590.6	7	38	56
KY	325.9	699.8	128.3	1,154.0	28	61	11
LA	107.7	455.8	269.9	833.4	13	55	32
MAINE	25.4	74.2	1.3	100.9	25	73	1
MD	92.1	251.1	137.0	480.1	19	52	29
MASS	45.9	19.7	2.7	68.3	67	29	4
MICH	256.9	770.6	302.0	1,329.5	19	58	23
MINN	105.3	1,513.8	853.0	2,472.0	4	61	35
MISS	224.3	515.6	141.6	881.5	25	58	16
MO	104.5	1,357.7	499.6	1,961.8	5	69	25
MONT	1.2	281.8	52.1	335.0	0	84	15
NEBR	21.6	576.0	1,354.5	1,952.1	1	30	69
NEV	2.6	12.6	7.0	22.3	12	57	31
N H	20.0	3.9	0.8	24.6	81	16	3
N J	97.4	74.4	24.5	196.3	50	38	12
N MEX	9.5	50.0	43.0	102.6	9	49	42
N Y	210.2	312.4	123.6	646.1	33	48	19
N C	738.8	482.4	666.5	1,887.7	39	26	35
N DAK	13.4	359.3	354.1	726.7	2	49	49
OHIO	269.4	1,293.2	858.0	2,420.6	11	53	35
OKLA	60.2	506.8	302.1	869.2	7	58	35
OREG	49.3	369.1	158.3	576.7	9	64	27
PA	269.6	219.4	106.7	595.8	45	37	18
R I	6.2	3.0	1.1	10.4	60	29	11
S C	196.3	377.8	290.1	864.2	23	44	34
S DAK	7.8	313.2	153.8	474.7	2	66	32
TENN	300.3	511.1	71.7	883.1	34	58	8
TEX	253.8	1,406.9	1,294.4	2,955.1	9	48	44
UTAH	0.5	4.6	37.6	42.7	1	11	88
VT	25.3	19.9	11.5	56.7	45	35	20
VA	189.1	285.2	304.1	778.3	24	37	39
WASH	46.3	394.2	516.7	957.2	5	41	54
W VA	33.0	25.2	19.3	77.5	43	33	25
WISC	97.4	865.2	342.2	1,304.9	7	66	26
WYO	4.0	69.2	47.4	120.6	3	57	39
P R	66.9	8.3	1.2	76.5	87	11	2
TOTAL 2/	6,176.4	26,337.8	18,679.3	51,193.5	12	51	37

1/ EXCLUDES SECONDARY AND MICRONUTRIENT MATERIALS.

2/ SUM OF INDIVIDUAL ITEMS MAY NOT EQUAL TOTAL DUE TO ROUNDING.

3/ SUM OF PERCENTS MAY NOT EQUAL 100 DUE TO ROUNDING.

TABLE 9 -- AVERAGE PRIMARY NUTRIENT CONTENT OF FLUID MIXTURES  
AND DIRECT-APPLICATION MATERIALS CONSUMED,  
YEAR ENDED JUNE 30, 1980

STATE	FLUID MIXTURES				FLUID MATERIALS			
	N	AVAILABLE		TOTAL	N	AVAILABLE		TOTAL
		P	K			P	K	
	25	2		25	2			
PERCENT								
ALA	5.6	15.6	9.5	30.7	39.5	0.0	0.0	39.5
ALAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ARIZ	10.7	34.2	0.3	45.3	42.6	1.9	0.0	44.5
ARK	7.4	8.1	15.7	31.2	40.8	0.0	0.0	40.8
CALIF	10.9	17.0	5.0	32.9	32.9	3.0	0.0	35.9
COLO	9.7	29.2	2.1	41.0	50.1	0.0	0.0	50.1
CONN	12.4	10.3	8.9	31.6	13.0	1.2	2.5	16.7
DEL	9.7	12.0	9.7	31.4	31.4	0.0	0.0	31.5
D C	10.4	4.0	4.0	18.4	39.6	0.0	5.0	45.5
FLA	10.1	5.1	11.9	27.1	32.4	3.9	0.4	36.7
GA	6.7	9.7	16.7	33.0	33.1	0.3	0.0	33.4
HAW	9.9	8.2	9.3	27.4	12.1	0.0	6.1	18.3
IDAHO	10.0	32.9	0.0	42.9	47.5	0.0	0.0	47.5
ILL	6.4	13.7	15.6	35.7	55.6	0.1	0.0	55.7
IND	7.1	19.9	11.2	38.2	46.2	0.0	0.1	46.3
IOWA	7.4	16.6	15.6	39.6	59.6	0.1	0.0	59.7
KANS	9.5	29.6	2.1	41.3	61.1	0.0	0.0	61.2
KY	7.1	16.9	14.5	38.5	53.8	0.0	0.0	53.8
LA	8.1	11.8	13.4	33.3	42.9	1.1	4.8	48.8
MAINE	14.2	7.5	10.8	32.5	35.2	0.0	0.0	35.2
MD	6.5	17.3	7.1	30.9	36.1	0.0	0.0	36.1
MASS	12.2	7.8	11.1	31.0	32.2	0.0	0.0	32.2
MICH	8.2	22.3	7.5	38.0	55.1	0.0	0.0	55.1
MINN	8.0	20.9	9.7	38.6	64.8	0.4	0.3	65.5
MISS	6.5	17.2	14.6	36.4	52.2	0.0	0.0	52.2
MO	8.7	9.8	12.4	30.9	55.3	0.0	0.1	55.5
MONT	10.0	33.5	0.0	43.5	42.3	2.0	1.7	46.0
NEBR	9.6	32.2	2.8	44.6	59.5	0.0	0.0	59.5
NEV	9.9	33.9	0.0	43.8	34.6	0.0	0.0	34.6
N H	15.3	7.8	11.7	34.8	38.0	0.0	0.0	38.0
N J	8.8	10.8	10.0	29.6	30.8	0.0	0.0	30.8
N MEX	10.2	34.5	0.0	44.7	51.5	0.0	0.0	51.5
N Y	8.7	24.5	6.9	40.1	44.1	0.0	0.0	44.1
N C	5.0	7.7	11.8	24.5	30.7	0.0	0.1	30.8
N DAK	9.6	32.5	0.6	42.7	71.6	0.0	0.0	71.6
OHIO	7.0	17.8	9.7	34.5	44.1	0.0	0.1	44.3
OKLA	9.6	25.8	2.3	37.8	66.6	0.0	0.0	66.6
OREG	15.9	25.1	1.4	42.4	35.7	0.5	0.0	36.2
PA	5.5	12.7	14.4	32.6	31.6	0.0	0.0	31.6
R I	12.0	7.1	9.9	28.9	0.0	0.0	0.0	0.0
S C	5.6	7.2	14.3	27.0	28.9	1.8	0.1	30.8
S DAK	11.8	22.3	4.5	38.6	62.2	0.1	0.0	62.2
TENN	5.1	12.0	19.6	36.7	43.4	0.1	0.0	43.5
TEX	15.4	15.9	2.0	33.3	57.7	0.4	0.0	58.1
UTAH	10.4	31.7	0.5	42.6	55.6	1.5	0.0	57.1
VT	13.2	7.5	13.8	34.6	33.1	0.0	0.0	33.1
VA	7.0	7.2	10.7	24.9	29.9	0.0	0.1	30.1
WASH	10.6	34.0	0.0	44.6	35.4	0.1	0.0	35.5
W VA	7.5	12.5	10.0	30.1	82.0	0.0	0.0	82.0
WISC	6.9	13.1	14.5	34.5	46.3	0.8	0.1	47.2
WYO	9.3	31.3	1.2	41.9	48.2	2.1	0.0	50.3
P R	0.0	0.0	0.0	0.0	20.4	0.0	0.0	20.4
TOTAL	8.6	16.3	10.1	35.0	49.9	0.5	0.1	50.5

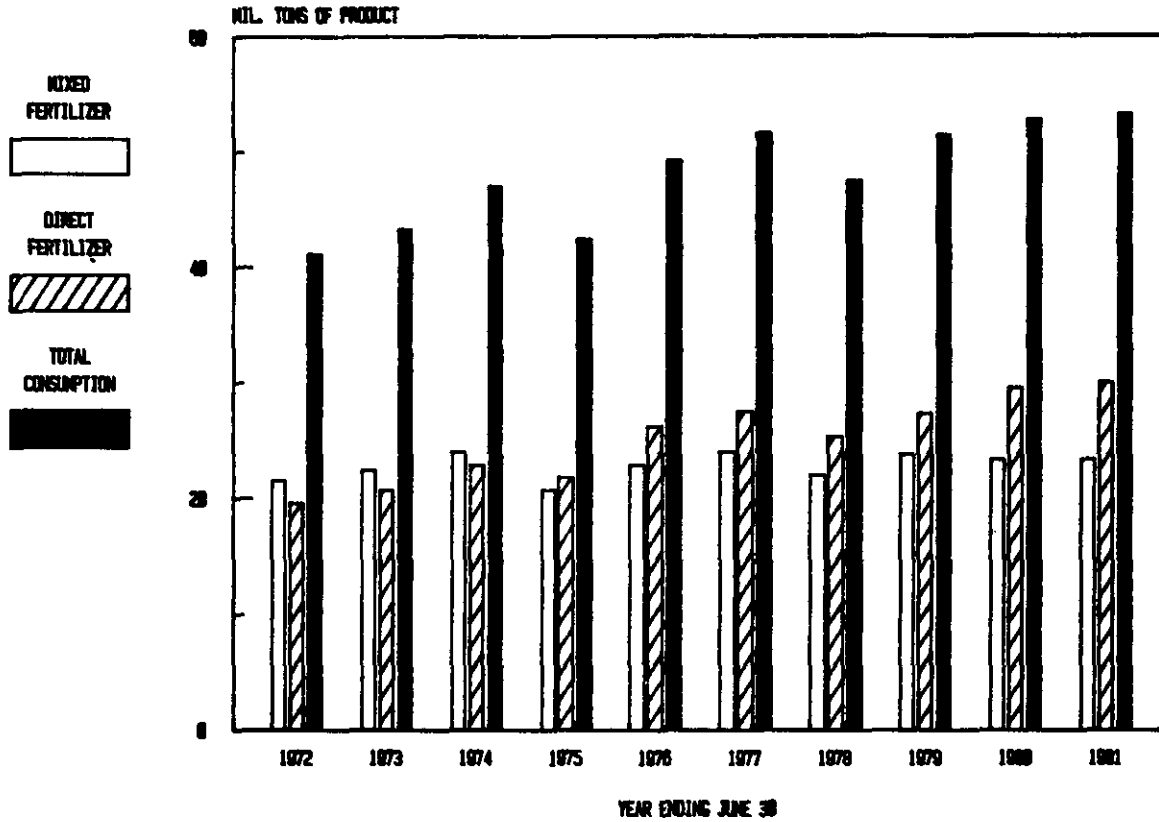
TABLE 10 -- AVERAGE PRIMARY NUTRIENT CONTENT OF FLUID MIXTURES  
AND DIRECT-APPLICATION MATERIALS CONSUMED,  
YEAR ENDED JUNE 30, 1981

STATE	FLUID MIXTURES				FLUID MATERIALS			
	N	AVAILABLE		TOTAL	N	AVAILABLE		TOTAL
		P 2	O 5			P 2	O 5	
PERCENT								
ALA	8.2	14.7	9.1	32.0	39.6	0.0	0.0	39.6
ALAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ARIZ	10.3	35.1	0.1	45.5	41.8	0.3	0.0	42.1
ARK	6.8	12.9	20.6	40.3	36.7	0.0	0.1	36.8
CALIF	11.5	13.0	5.9	30.4	34.3	3.2	0.1	37.6
COLO	9.6	31.3	1.1	42.0	46.1	0.1	0.1	46.2
CONN	12.5	9.7	9.5	31.7	14.8	1.0	1.3	17.2
DEL	7.9	11.6	12.6	32.0	31.0	0.0	0.0	31.1
D C	17.0	5.0	7.0	30.0	59.1	0.0	0.0	59.1
FLA	9.5	5.1	12.2	26.8	34.3	2.0	0.4	36.6
GA	7.3	9.7	16.1	33.1	32.3	0.2	0.1	32.5
HAW	10.3	11.0	7.9	29.2	9.3	0.0	8.2	17.5
IDAHO	15.5	33.1	0.5	49.2	47.3	0.5	0.0	47.8
ILL	6.3	14.0	16.2	36.5	56.8	0.3	0.1	57.1
IND	7.1	20.8	10.6	38.4	44.9	0.0	0.1	45.1
IOWA	7.0	16.4	16.2	39.7	61.3	0.1	0.0	61.4
KANS	10.0	26.3	1.9	38.3	60.6	0.0	0.0	60.6
KY	7.1	15.0	15.0	37.0	51.3	0.0	0.0	51.3
LA	8.1	11.8	13.4	33.3	42.9	1.1	4.6	48.5
MAINE	11.7	8.4	11.4	31.5	29.9	0.0	0.0	29.9
MD	6.3	17.3	7.2	30.8	33.3	0.0	0.0	33.3
MASS	11.7	7.7	10.9	30.2	31.2	0.0	0.0	31.2
MICH	7.7	21.4	6.8	35.9	52.2	0.0	0.0	52.2
MINN	7.8	20.3	10.9	39.0	65.5	0.3	0.2	66.0
MISS	3.8	14.5	15.9	39.2	54.4	0.0	0.0	54.4
MO	10.2	11.0	13.8	35.0	52.3	0.0	0.1	52.4
MONT	10.0	33.6	0.0	43.6	55.3	0.5	0.5	56.3
NEBR	10.5	29.7	3.2	43.4	59.5	0.0	0.0	59.5
NEV	9.9	33.9	0.0	43.8	31.8	0.0	0.0	31.8
N H	15.0	8.4	11.4	34.8	35.4	0.0	0.0	35.4
N J	9.5	10.0	9.7	29.2	31.9	0.0	0.0	31.9
N MEX	10.0	33.9	0.1	44.0	51.4	0.0	0.0	51.4
N Y	9.5	29.2	9.0	47.7	46.1	0.0	0.0	46.1
N C	5.5	8.3	13.0	26.9	30.1	0.0	0.2	30.3
N DAK	8.6	34.8	2.5	46.0	73.0	0.0	0.0	73.0
OHIO	7.4	17.9	9.7	34.9	42.4	0.3	0.1	42.8
OKLA	9.6	20.9	4.2	34.8	58.8	0.0	0.0	58.8
OREG	10.3	30.4	0.6	41.3	35.6	3.1	0.0	38.7
PA	8.7	13.7	10.4	32.8	32.7	0.7	0.4	33.8
R I	10.5	9.4	9.9	29.8	0.0	0.0	0.0	0.0
S C	6.7	9.7	12.8	29.2	29.3	0.0	0.0	29.3
S DAK	9.6	24.3	5.8	39.7	64.9	0.4	0.0	65.3
TENN	9.6	20.6	14.4	44.6	39.7	0.0	1.0	40.7
TEX	16.0	14.7	2.2	32.9	58.7	0.4	0.0	59.1
UTAH	10.2	36.9	0.4	47.6	23.9	14.8	0.0	38.7
VT	12.9	9.3	24.7	46.9	35.9	0.0	0.0	35.9
VA	7.0	7.5	10.3	24.8	27.8	0.0	0.4	28.2
WASH	10.7	30.9	2.1	43.7	34.5	0.0	0.2	34.8
W VA	6.8	21.6	15.8	44.2	58.9	0.0	0.0	58.9
WISC	7.1	12.6	14.3	34.0	45.8	0.2	0.0	46.0
WYO	9.8	33.4	0.3	43.5	40.9	9.0	0.0	49.9
P R	0.0	0.0	0.0	0.0	20.0	0.0	0.0	20.0
TOTAL	9.0	16.0	10.2	35.2	49.7	0.5	0.1	50.3

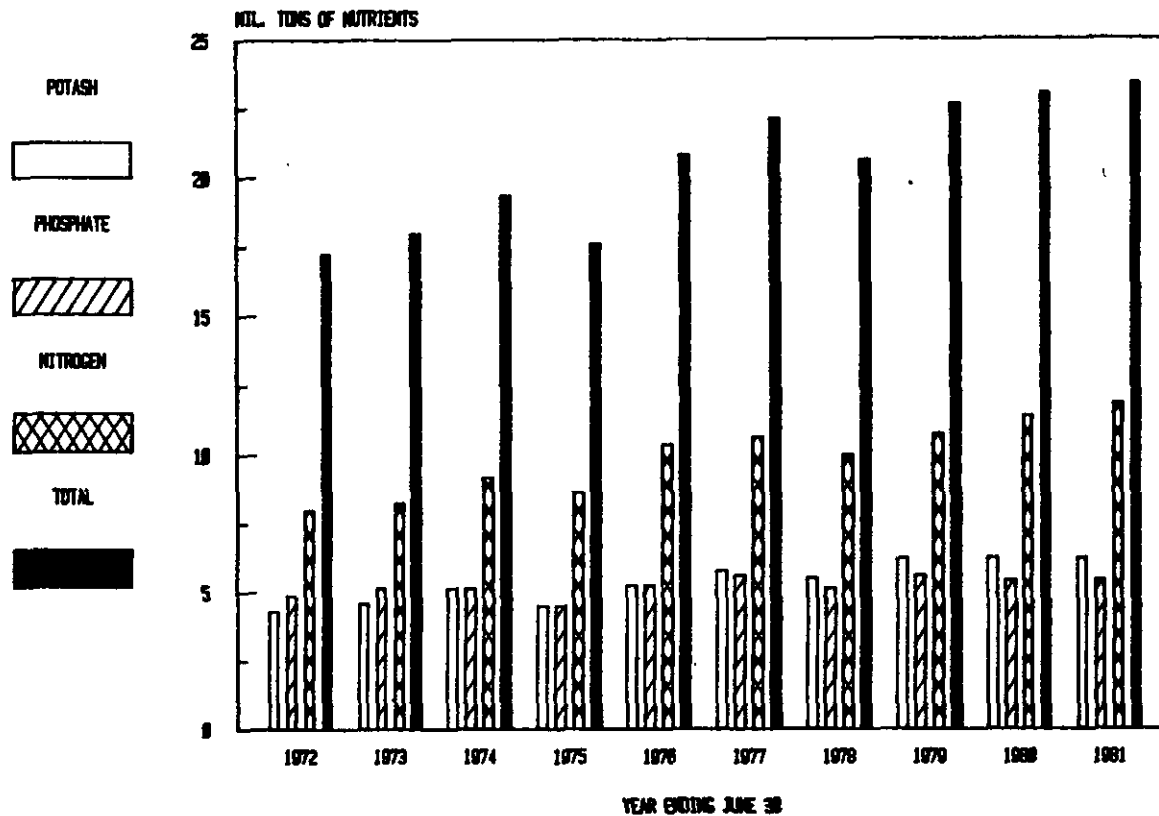
TABLE 11.--UNITED STATES CONSUMPTION OF FERTILIZERS AND PLANT NUTRIENTS  
1960-1981

TOTAL CONSUMPTION								
YEAR ENDED JUN 30	GROSS TONNAGES				PRIMARY NUTRIENT CONTENT			
	MIXED FERTILIZER	PRIMARY NUTRIENT MATERIAL	SECONDARY & MICRO-NUTRIENTS	TOTAL	N	AVAILABLE P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	TOTAL
1,000 TONS								
1960	15,650	7,850	1,378	24,877	2,738.0	2,572.4	2,153.3	7,463.7
1961	15,735	8,639	1,194	25,567	3,030.8	2,645.1	2,168.5	7,844.4
1962	16,205	9,100	1,310	26,615	3,370.0	2,807.0	2,270.5	8,447.5
1963	17,157	10,229	1,459	28,844	3,929.1	3,072.9	2,503.4	9,505.4
1964	18,093	11,113	1,475	30,681	4,352.8	3,377.8	2,729.7	10,460.3
1965	18,559	11,756	1,521	31,836	4,638.5	3,512.2	2,834.5	10,985.2
1966	19,659	13,412	1,461	34,532	5,326.3	3,897.1	3,221.2	12,444.6
1967	21,132	14,552	1,397	37,081	6,027.1	4,304.7	3,641.8	13,973.6
1968	21,294	15,832	1,617	38,743	6,787.6	4,453.3	3,792.6	15,033.5
1969	21,234	16,380	1,334	38,949	6,957.6	4,665.6	3,891.6	15,514.8
1970	20,961	17,331	1,297	39,589	7,459.0	4,573.8	4,035.5	16,068.3
1971	21,513	18,389	1,216	41,118	8,133.6	4,803.4	4,231.4	17,168.4
1972	21,511	18,385	1,310	41,206	8,022.3	4,863.7	4,326.8	17,212.8
1973	22,547	19,275	1,466	43,288	8,295.1	5,085.2	4,648.7	18,029.0
1974	24,067	20,897	2,130	47,094	9,157.2	5,098.6	5,082.6	19,338.4
1975	20,647	19,959	1,878	42,484	8,600.8	4,506.8	4,453.2	17,560.9
1976	22,958	23,935	2,296	49,189	10,411.6	5,227.6	5,209.7	20,848.8
1977	24,099	24,999	2,525	51,624	10,647.4	5,629.7	5,833.8	22,110.9
1978	22,110	23,511	1,877	47,497	9,964.6	5,096.1	5,526.1	20,586.9
1979	23,742	25,600	2,139	51,480	10,714.7	5,605.8	6,244.5	22,565.1
1980	23,270	27,221	2,296	52,787	11,406.7	5,431.5	6,245.1	23,083.3
1981	23,340	27,853	2,136	53,329	11,784.3	5,423.5	6,243.2	23,451.1

## CONSUMPTION OF MIXED FERTILIZERS AND DIRECT APPLICATION MATERIALS



## PLANT NUTRIENT CONSUMPTION



**UNITED STATES DEPARTMENT OF AGRICULTURE  
WASHINGTON, D.C. 20250**

**OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE, \$300**

To stop mailing  or to change your  
address  send this sheet with label  
intact, showing new address, to Crop  
Reporting Board Publications, SRS, U.S.  
Dept. of Agriculture, Rm 5829 South  
Building, 14th & Independence Ave. S.W.,  
Wash., D.C. 20250.

**POSTAGE AND FEES PAID  
U.S. DEPARTMENT OF  
AGRICULTURE  
AGR 101  
FIRST CLASS**

