

Side-dressing Manure on Corn and Topdressing on Wheat

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CFAES



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

**Painting:
“The Arrival of the 2022 Fertilizer Bill”
Oil on Canvas.**



The Punk Rock Farmer

3h · 🌐



NUHN

Two swine finishing buildings capable of finishing 10,000 pigs per year. Also produce over one million gallons of manure.





BROOKSIDE LABORATORIES, INC.

** MANURE ANALYSIS REPORT **

Hancock County Extension Office
7868 CR 140 Suite B
Findlay, OH 45840

File Number: 40751
Date Received: 06/02/2017
Date Reported: 06/06/2017

Submitted By: Home Office

Lab Number 5060
Description ~~XXXXXXXXXX~~ 17

	% Dry Basis	% Wet Basis	lbs/1000gal
Moisture		97.24	8346.7
Mineral Matter	44.20	1.22	104.72
Lost By Ign (Org M+)	55.80	1.54	132.19
Total Nitrogen	15.91	0.439	37.68
Ammonium-N (NH4-N)	15.18	0.419	35.97
Nitrate-N (NO3-N)		< 0.010	
Organic-N	0.73	0.020	1.72
Phosphorus (P)	2.28	0.063	5.41
Phos. as (P2O5)	5.22	0.144	12.36
Potassium (K)	10.47	0.289	24.81
Potassium as (K2O)	12.61	0.348	29.87
Calcium (Ca)	1.63	0.045	3.86
Magnesium (Mg)	1.09	0.030	2.58
Sodium (Na)	5.07	0.140	12.02
Sulfur (S)	1.20	0.033	2.83
	ppm Dry Basis	ppm Wet Basis	lbs/1000gal
Boron (B)	167.39	4.62	0.040
Iron (Fe)	2235.51	61.70	0.530
Manganese (Mn)	324.64	8.96	0.077
Copper (Cu)	384.06	10.60	0.091
Zinc (Zn)	1496.38	41.30	0.355

Want a 2:1 ratio of N to P2O5

50% of N, P, & K value is the ammonium N



Reviewed by *[Signature]*

Value of Liquid Swine Manure per 1,000 gallons

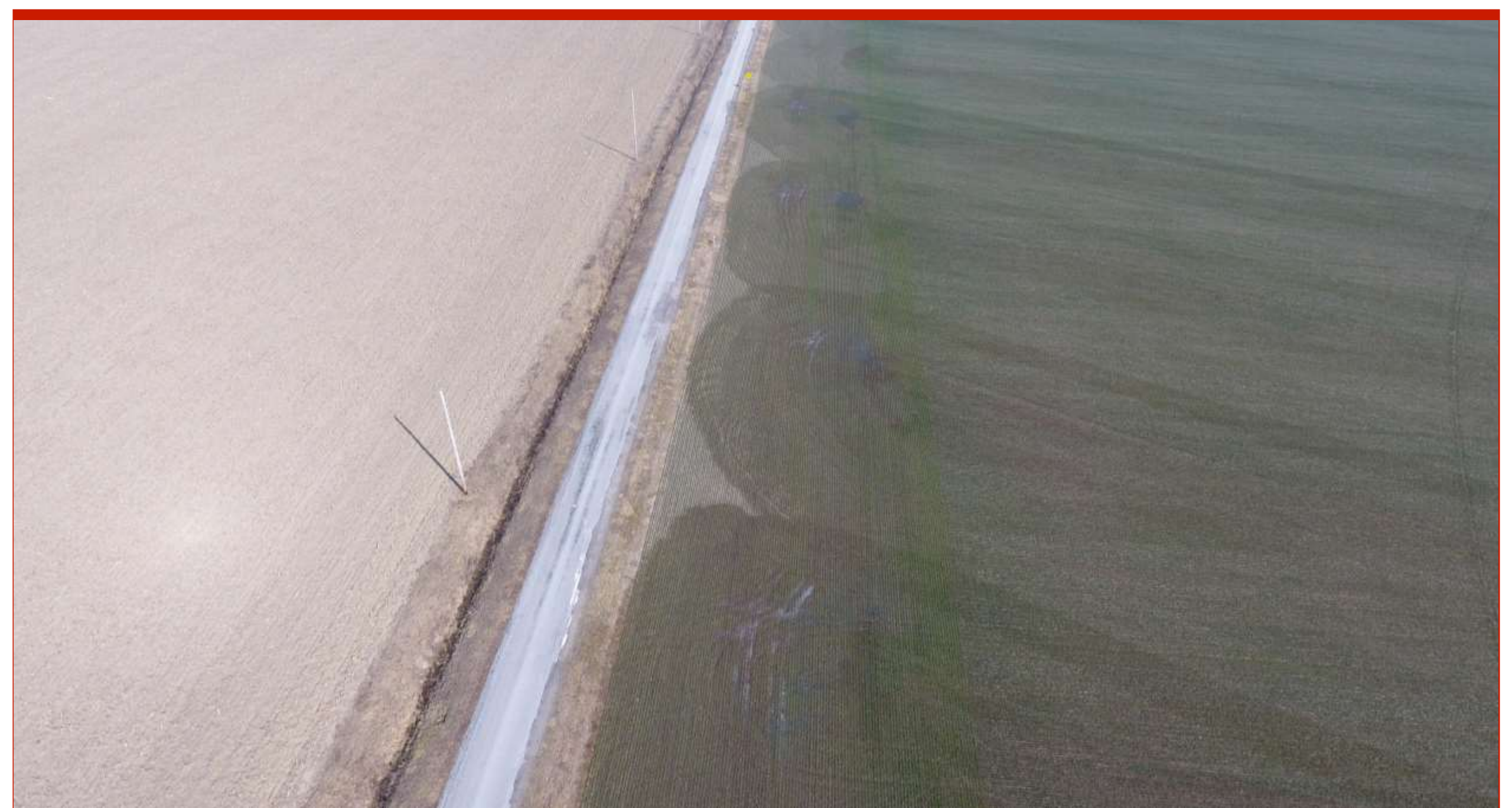
35.97 pounds of N (\$1.04)	\$37.41
12.36 pounds of P205 (\$0.86)	\$10.63
29.87 pounds of K20 (\$0.65)	\$19.42
	\$67.46

About 6.7 cents per gallon
(If the Nitrogen is captured)





















2012-2016 OARDC Manure Sidedress Yields; bushels per acre

PRE-EMERGENT TREATMENTS	2012	2013	2014	2015	2016	5-Year Average
Incorporated 28% UAN 200#	111.5	184.6	145.1	130.8	140.9	142.6
Incorporated swine manure 5,000 gal	128.6	191.8	146.5	161.9	162.0	158.2
Surface-applied swine manure 5,000 gal	109.5	175.7	137.2	110.3	125.5	131.6
Inc. dairy manure +28% UAN 13,500 gal	132.0	185.4	166.1	146.3	163.7	158.7
Surface dairy manure +28%UAN 13,500 gal	97.0	166.0	141.9	106.4	122.1	126.7
POST-EMERGENT TREATMENTS						
Incorporated 28% UAN	116.0	181.9	140.9	140.1	145.1	144.8
Incorporated swine manure	138.4	196.7	139.9	158.5	183.7	163.4
Surface-applied swine manure	116.4	188.0	115.6	114.6	153.1	137.5
Incorporated dairy manure +28%UAN	138.8	192.0	156.9	167.5	167.7	164.6
Surface-applied dairy manure +28%UAN	101.6	181.5	125.3	111.6	156.1	135.2
Zero nitrogen check	62.6	82.0	67.0	40.2	48.7	60.1

+ 15.6
- 26.6

+ 18.6
- 25.9















Six Years of On-Farm Swine Manure Drag Hose Plots (bu/acre)

<u>Year</u>	<u>Swine Manure</u>	<u>28%UAN</u>
2019	195	168
2018	264	246
2017	165	145
2016	222	216
2015	154	121
2014	204	204
6-Year Average	200.6	183.3

17.3 bu/acre difference

Nutrient Balance of Swine Manure Side-dress

Crop		P ₂ O ₅	K ₂ O
Corn	200 bu		
(.35) (.20)		70 lbs	40 lbs
Soybeans	65 bu		
(.79) (1.14)		51 lbs	74 lbs
Removal		121 lbs	114 lbs
6,500 gal	Manure 221#N	117 lbs	143 lbs
Net Nutrient Gain		-4 lbs	+29 lbs



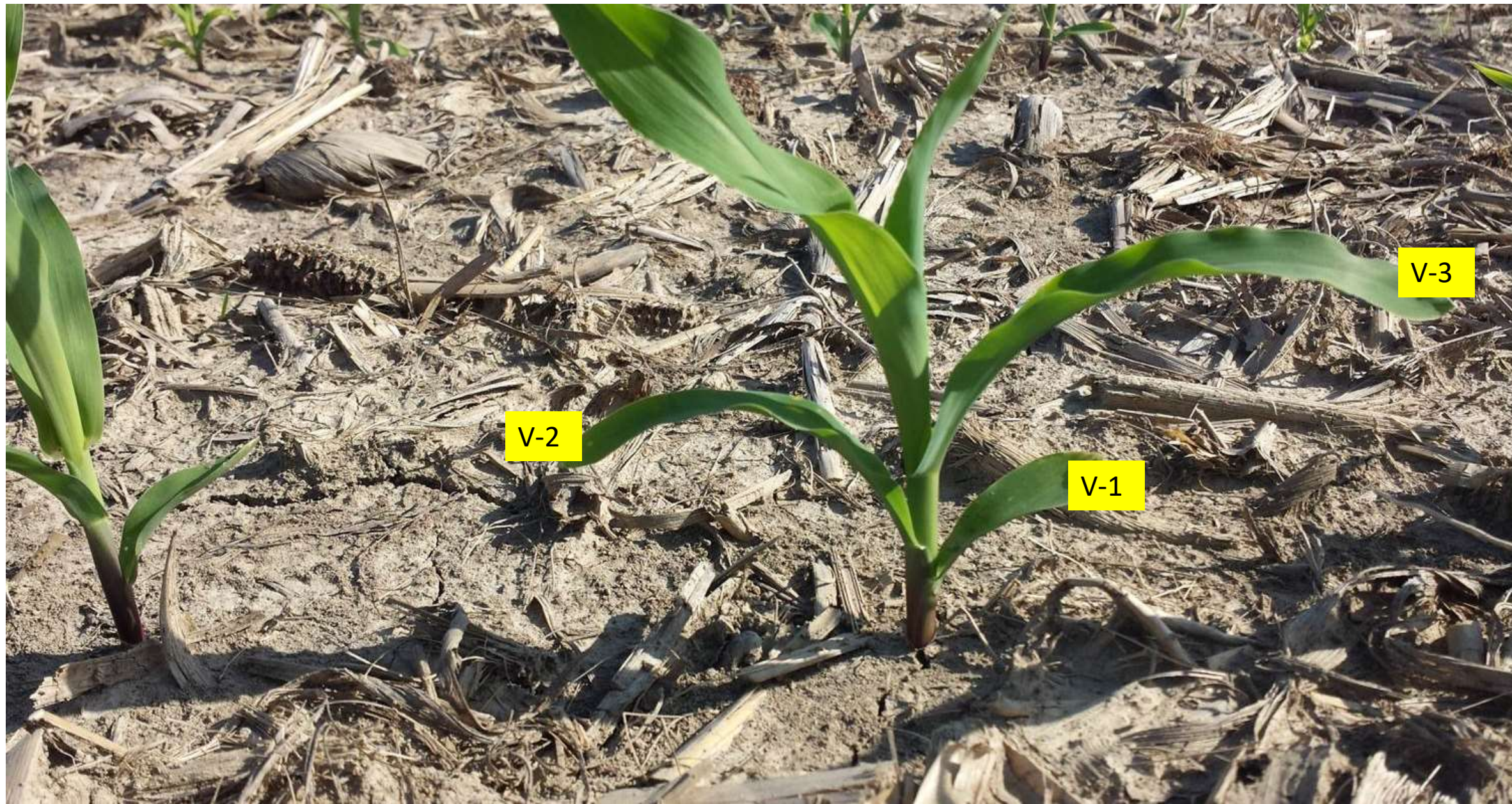












V-2

V-1

V-3













4-R's using manure

- **Right Nutrient**
- **Right Place**
- **Right Time**
- **Right Amount**

Social Media

- Check out the Facebook page
 - Ohio State Extension Environmental and Manure Management





Thank You!

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