

Table 3D.4. Trends in the Average Acre Treatments per Acre for Pesticides Applied on Indiana Soybeans Over Time in 5 Year Increments (1990-2015, excerpt)

	1990*	1995*	2000*	2005*	2010	2015*
<i><u>Fungicides</u></i>						
Azoxystrobin					0.02	0.05
Propiconazole					0.01	0.02
Pyraclostrobin					0.03	
Other Fungicides <sup>3</sup>					0	0
All Fungicides <sup>3</sup>						
<i><u>Herbicides</u></i>						
2,4-D	0.02	0.21	0.14	0.14	0.29	0.31
Acetochlor						0.012
Acifluorfen, sodium	0.08	0.11				
Alachlor	0.26	0.05				
Ammonium chloramben	0.02					
Bentazon	0.15	0.13				
Chlorimuron-ethyl	0.35	0.18	0.21	0.09	0.14	0.15
Clethodim		0.05	0.05		0.04	0.06
Clomazone	0.11	0.05				
Cloransulam-methyl			0.05	0.003	0.01	0.13
Dimethenamid						0.11
Ethalfuralin	0.04					
Fenoxaprop		0.07	0.1	0.008		
Fluazifop-P-butyl	0.04	0.12	0.1	0.008		
Flumetsulam						
Flumioxazin				0.005	0.03	0.09
Fomesafen	0.02	0.07	0.06	0.013		0.06
Glufosinate-ammonium						0.03
Glyphosate	0.05	0.34	0.99	1.26	1.44	1.41
Imazamox			0.05			
Imazaquin	0.14	0.25	0.02	0.04	0.04	
Imazethapyr	0.08	0.38	0.09	0.04	0.06	0.15
Lactofen	0.03	0.15				
Linuron	0.15					
MCPA				0.008		
Metolachlor	0.19	0.09	0.02			0.07
Metribuzin	0.34	0.11	0.06	0.01	0.04	0.19
Paraquat	0.02					
Pendimethalin	0.07	0.36	0.05	0.005		
Propachlor	0.02					
Pyroxasulfone						0.05
Quizalofop-ethyl						
Saflufenacil					0.02	0.21
Sethoxydim	0.04	0.07				
S-metolachlor						0.04
Sulfentrazone			0.05	0.02	0.04	0.14
Sulfosate			0.05			
Thifensulfuron		0.15	0.19			0.01
Tribenuron-methyl				0.005		
Trifluralin	0.19	0.07				
Other Herbicides <sup>3</sup>		0	0	0	0	0

<u>Insecticides</u>					0.018	0.02
Bifenthrin					0.013	0.04
Chlorpyrifos						0.02
Cyfluthrin					0.022	
Dimethoate						
Other Insecticides <sup>3</sup>					0	0
All Insecticides <sup>3</sup>				0		
Notes:						
1. The average acre treatments per acre is the total number of acres treated with a distinct active ingredient (AI) divided by the number of acres planted. The active ingredients are categorized by the type of pesticide; herbicides, insecticides, fungicides and other pesticides (H/I/F/O).						
2. The data elements in the underlining calculations for acre treatments are extrapolated or interpolated for years not surveyed by NASS. The following methodology rules are as follows:						
- Years prior to the first year an AI had reported usage, is set to 0.						
- If an AI did not have significant reported usage in a given year for a crop/state that was surveyed, then it is set to 0 for the year surveyed. (See note 3 for further implications).						
- Years after the last year an AI had reported usage, is extrapolated forward as equal to the last crop/state surveyed year.						
- All other years are interpolated between two known years. In years that are set to 0, it is assumed that a straight-line, phase in or phase out period for the AI was implemented. (see note 3 for further implications).						
3. NASS reports only pounds applied for some pesticide-crop combinations when: (a) the pesticide is applied on less than 1% of acres, (b) a trivial amount of a low-dose active ingredient is applied, or (c) when only one or a few producers reported use of the pesticide, raising confidentiality concerns. In such cases, the unreported AI's are accounted for by subtracting the sum of pounds applied of the reported AI's from the total pounds applied (given by NASS) for each pesticide type (H/I/F/O) and grouped as 'Other' Fungicides/Herbicides/Insecticides/ Other Pesticides. Hence, there is no known rates or percent acres treated, available to calculate acre treatments. Therefore acre treatments per acre may be under-reported. This is applicable for Soybeans in Indiana for All Fungicides in 2006 and All Insecticides in 2005, Other Fungicides from 2007-2016, Other Herbicides from 1994-2016, and Other Insecticides from 2007-2016.						
* Denotes the years that were surveyed by USDA's National Agricultural Statistics Service (NASS).						