Appendix D: Focusing on Pesticides that Affect Female Reproductive Health

Here, we limit the pesticide sample to those that prior literature has specifically identified as affecting female reproductive and infant health. Using only these 56 pesticides, eqs. (1) and (2) in the main text were re-estimated and the results are presented in Tables D1 and D2. See the main text for an in-depth discussion of these results. In short, the results are robust to this alternative specification of the pesticide use data.

Table D1: Impact of SWD on Pesticides Known to Affect Female Reproductive Health

	(1)	(2)	(3)
	Log(Insecticides)	Log(Fungicides)	Log(Herbicides)
After SWD detection	0.424***	0.355***	0.017
	(0.060)	(0.055)	(0.89)
Weather controls	Yes	Yes	Yes
Agricultural district fixed effects	Yes	Yes	Yes
State-year fixed effects	Yes	Yes	Yes
R-squared	0.509	0.560	0.704
Sample size	19,819	20,522	21,749

Notes: dependent variables have been normalized by county land area and have been log adjusted. Same explanatory variables included as in Table 2 of the main text. Only those 56 pesticides that prior literature has shown to affect female reproductive health are used as dependent variables. Two-way clustered county and year standard errors reported in parentheses.
***$p<0.01$; **$p<0.05$; *$p<0.1$.

Table D2: Investigating the Dose-response Relationship between Pesticides Known to Affect Female Reproductive Health and Infant Outcomes: IV Regressions

	(1) Insecticides (IV)	(2) Fungicides (IV)
Panel A: Low Birth Weight		
Log(insecticide use)	0.010**	-
	(0.005)	
Log(fungicide use)	-	0.009*
		(0.005)
Mother and infant characteristics	Yes	Yes
Agricultural district fixed effects	Yes	Yes
State-year fixed effects	Yes	Yes
First-stage *F*-statistic	27.14	31.24
R-squared (within)	0.262	0.241
Sample size	16,768	17,558
Panel B: Prematurity		
Log(insecticide use)	0.021***	-
	(0.004)	
Log(fungicide use)	-	0.016***
		(0.006)
Mother and infant characteristics	Yes	Yes
Agricultural district fixed effects	Yes	Yes
State-year fixed effects	Yes	Yes
First-stage *F*-statistic	26.99	32.10
R-squared (within)	0.211	0.195
Sample size	16,783	17,579

Notes: each column-panel combination is from a separate 2SLS regression of the effect of (log) insecticide or (log) fungicide use on either low birth weight or prematurity. The instrument is initial SWD detection. Only those 56 pesticides that prior literature has identified as affecting female reproductive health are included. Mother and infant characteristics are the same as those in Table 3 in the main text. First-stage regression includes the same set of covariates as Table 3 in the main text. Pesticide use has been normalized by county land area. Two-way clustered county and year standard errors reported in parentheses.
***$p<0.01$; **$p<0.05$; *$p<0.1$.