Table S1. Categorization of enhanced efficiency nitrogen fertilizer (EENF) used in this meta-analysis.

Groups	**Sub-groups**	**Products**
Inhibitors (IS)	Nitrification Inhibitor (NI)	Nitrapyrin
		DMPP (*3,4-dimethylpyrazole phosphate*)
		DCD (*dicyandiamide*)
		Neem (*neem oil, neem cake, and nimin*)
		Karanjin (*3-methoxy furano-2', 3', 7, 8-flavone*)
		MHPP (*methyl 3- (4-hydroxyphenyl) propionate*)
	Urease Inhibitor (UI)	HQ (*Hydroquinone*)
		NBPT (*N-(N-butyl) thiophosphoric triamide*)
		NPPT (*N-(N-Propyl)thiophosphoric triamide*)
		PPD (*Phosphorodiamidic acid*)
	Urease Plus Nitrification	HQ+DCD
	Inhibitor (UI+NI)	HQ+Nitrapyrin
		NPPT+Nitrapyrin
		NBPT+Nitrapyrin
		NBPT+PPD+DMPP
		NAM *(a combination of urease inhibitor, nitrification inhibitor and phosphor activator)*
Slow or Controlled	Slow or Controlled	Polymer-coated
Release Fertilizer (S/CRF)	Release Fertilizer (S/CRF)	Sulphur-coated
		Zeolite-mixed

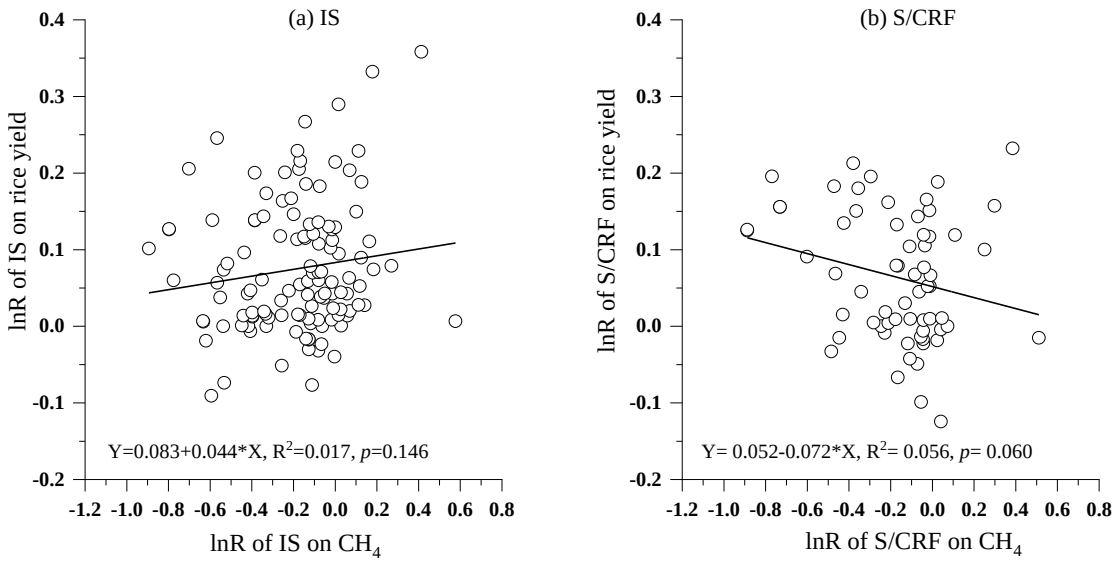


Figure S1. Response of CH_4 effect to yield effect under the addition of IS (a) and S/CRF (b).

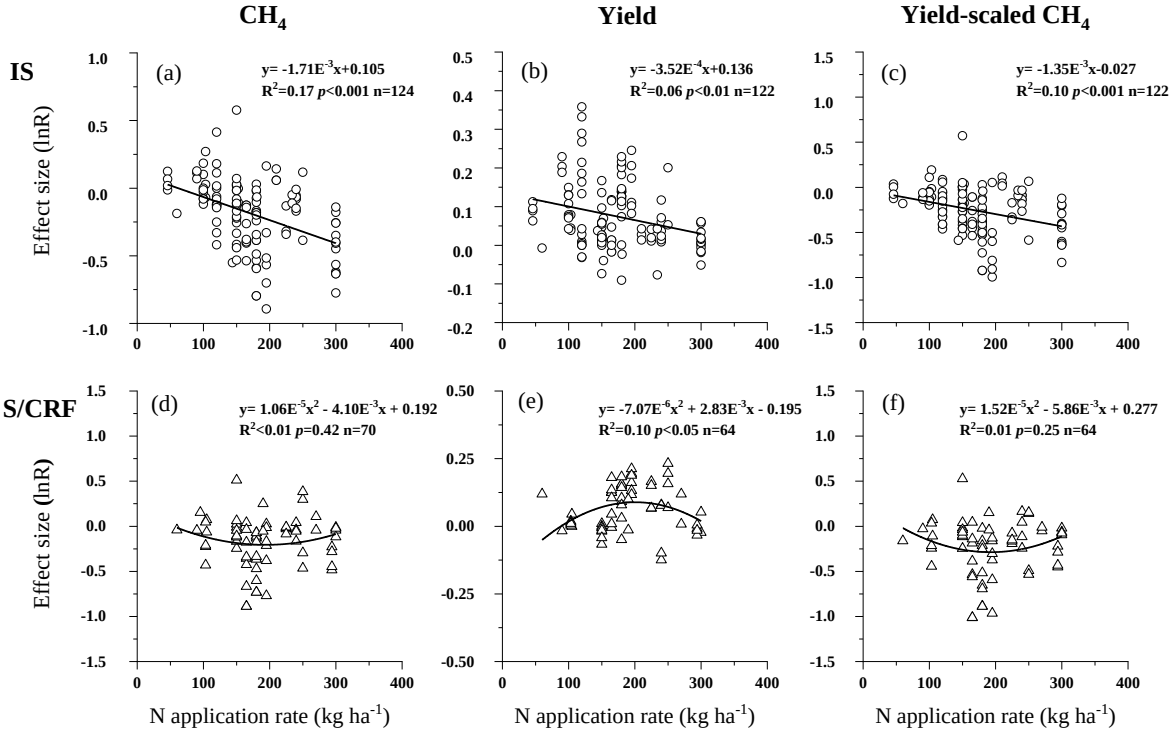


Figure S2. Response of CH_4, Yield and Yield-scaled CH_4 to the N application rates by the IS ((a), (b), (c)) and S/CRF((d), (e), (f)).