Supplement

Appendix A

Table 1. Categories of effectiveness (Sutherland et al, 2015).

Category	Description	General criteria	Thresholds
Beneficial	Effectiveness has been demonstrated by clear evidence. Expectation of harms is small compared with the benefits	High median benefit score High median certainty score Low median harm score	Effectiveness: >60% Certainty: >60% Harm: <20%
Likely to be beneficial	Effectiveness is less well established than for those listed under 'effective' **OR** There is clear evidence of medium effectiveness	High benefit score Lower certainty score Low harm score **OR** Medium benefit score High certainty score Low harm score	Effectiveness: >60% Certainty: 40-60% Harm: <20% **OR** Effectiveness: 40-60% Certainty: ≥40% Harm: < 20%
Trade-off between benefit and harms	Interventions for which practitioners must weigh up the beneficial and harmful effects according to individual circumstances and priorities	Medium benefit and medium harm scores **OR** High benefit and high harm scores High certainty score	Effectiveness: ≥40% Certainty: ≥40% Harm: ≥20%
Unknown effectiveness (limited evidence)	Currently insufficient data, or data of inadequate quality	Low certainty score	Effectiveness: Any Certainty: <40% Harm: Any
Unlikely to be beneficial	Lack of effectiveness is less well established than for those listed under 'likely to be ineffective or harmful'	Low benefit score Medium certainty score and/or some variation between experts	Effectiveness: <40% Certainty: 40-60% Harm: <20%
Likely to be ineffective or harmful	Ineffectiveness or harmfulness has been demonstrated by clear evidence	Low benefit score High certainty score (regardless of harms) **OR** Low benefit score High harm score (regardless of certainty of effectiveness)	Effectiveness: <40% Certainty: >60% Harm: Any **OR** Effectiveness: <40% Certainty: ≥40% Harm: ≥20%

Plot data

Figure 01

	Mixed amendments	Cover crop	Crop rotation
Number of soil types	5	6	8
Number of locations	3	7	5
Number of studies	11	12	14

R script:
```
read.table(file="barplot.txt",header=T)->coverage
attach(coverage)
names(coverage)
barplot(as.matrix(coverage),beside=T, ylim=c(0,18),xaxt="n
",ylab="Coverage of evidence", xlab="Actions beneficial to soil
fertility")
axis(1,at=c(2.5,6.5,10.5),labels=c("Mixed amendments","Cover
crops","Crop rotation"))
legend(6.87,18,c("Number of soil types","Number of
locations","Number of studies"),fill=grey.colors(3))
```

Figure 02

Effectiveness	Certainty	Negative side-effects
69	64	15
75	67	16
66	75	8
65	54	19
64	46	19
55	62	18
51	58	14
61	72	46
55	52	64
70	59	26
60	64	23
63	54	29
53	59	32
45	44	54
53	53	34
46	45	36
49	45	20
46	38	33
58	35	20
50	33	24
53	36	16
54	29	19
35	37	23

40	31	17
36	23	19
14	34	20
26	40	48

R script:

```
read.table(file="added.var.txt",header=T)->coverage

attach(coverage)

names(coverage)

spcor((coverage),method=c("spearman"))

install.packages("car")

library(car)

mod1<-lm(eff~cert+neg,data=mydataframe)

avPlot(mod1,cert,neg,main="",xlab="Certainty | Negative side-
effects",ylab="Effectivness | Negative side-effects",grid=T)
```