

SUPPLEMENTARY FIGURES S1-S12

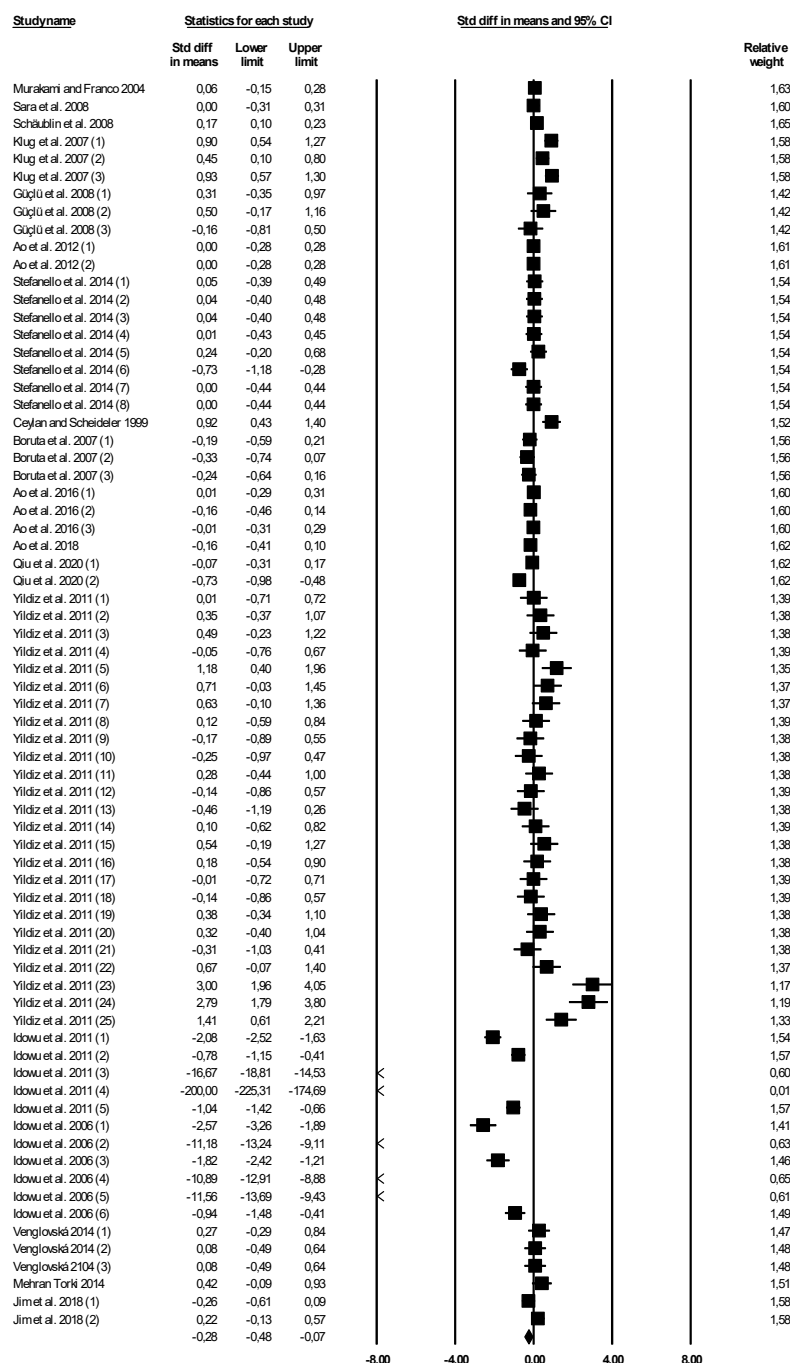


Figure S1: Forest plot of the effect of organic trace mineral supplementation on feed intake (g/day/hen) of laying hens. Study name refers to the reference of that study. Raw mean differences (difference in means) represent the effect size estimate. Each square represents

the mean effect size for that study. Thus, the squares to the right of the zero mid-line represent greater feed intake, squares to the left of the 0 mid-line indicate a lower feed intake and squares at the 0 mid-line indicate no effect on feed intake. The upper and lower limit of the line connected to the square represents the upper and lower 95% confidence interval (CI) for the effect size. The size of the square reflects the relative weighting of the study to the overall effect size estimate, with larger squares representing greater weight. The diamond at the bottom represents the overall effect size estimate.

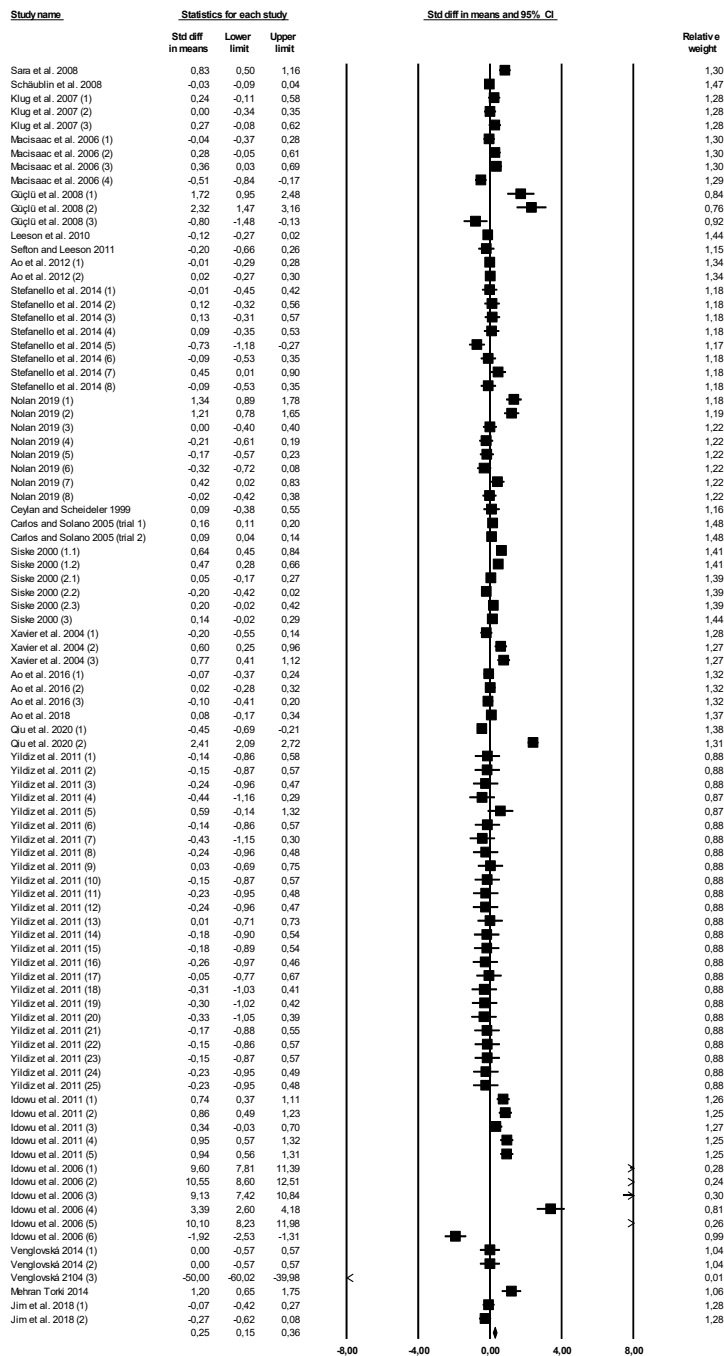


Figure S2: Forest plot of the effect of organic trace mineral supplementation on hen-day production (%) of laying hens. Study name refers to the reference of that study. Raw mean differences (difference in means) represent the effect size estimate. Each square represents the mean effect size for that study. Thus, the squares to the right of the zero mid-line represent higher hen-day production, squares to the left of the 0 mid-line indicate lower hen-day production and squares at the 0 mid-line indicate no effect on hen-day production. The

upper and lower limit of the line connected to the square represents the upper and lower 95% confidence interval (CI) for the effect size. The size of the square reflects the relative weighting of the study to the overall effect size estimate, with larger squares representing greater weight. The diamond at the bottom represents the overall effect size estimate.

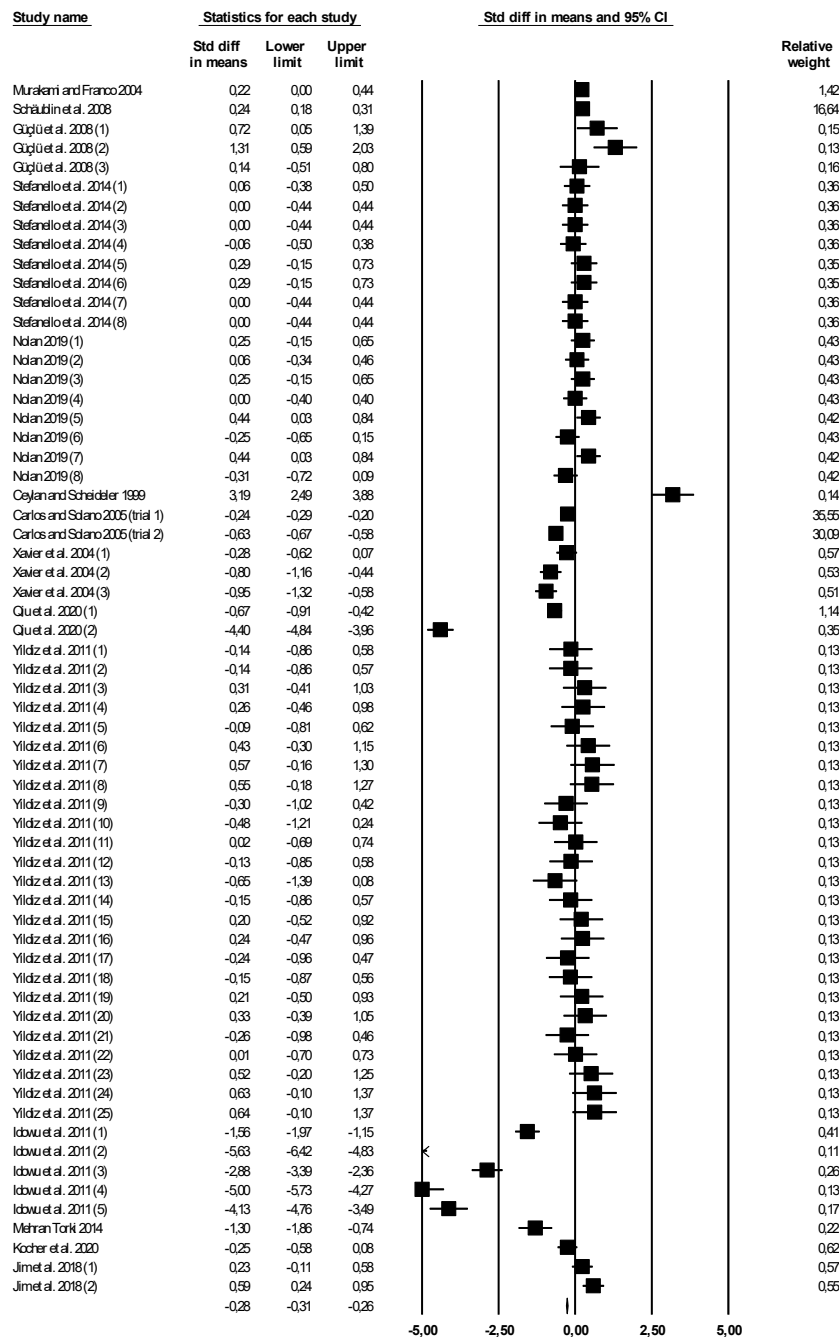


Figure S3: Forest plot of the effect of organic trace mineral supplementation on FCR (g feed/kg egg) of laying hens. Study name refers to the reference of that study. Raw mean differences (difference in means) represent the effect size estimate. Each square represents the mean effect size for that study. Thus, the squares to the right of the zero mid-line represent a higher FCR, squares to the left of the 0 mid-line indicate a lower FCR and squares at the 0 mid-line indicate no effect on FCR. The upper and lower limit of the line connected

to the square represents the upper and lower 95% confidence interval (CI) for the effect size. The size of the square reflects the relative weighting of the study to the overall effect size estimate, with larger squares representing greater weight. The diamond at the bottom represents the overall effect size estimate.

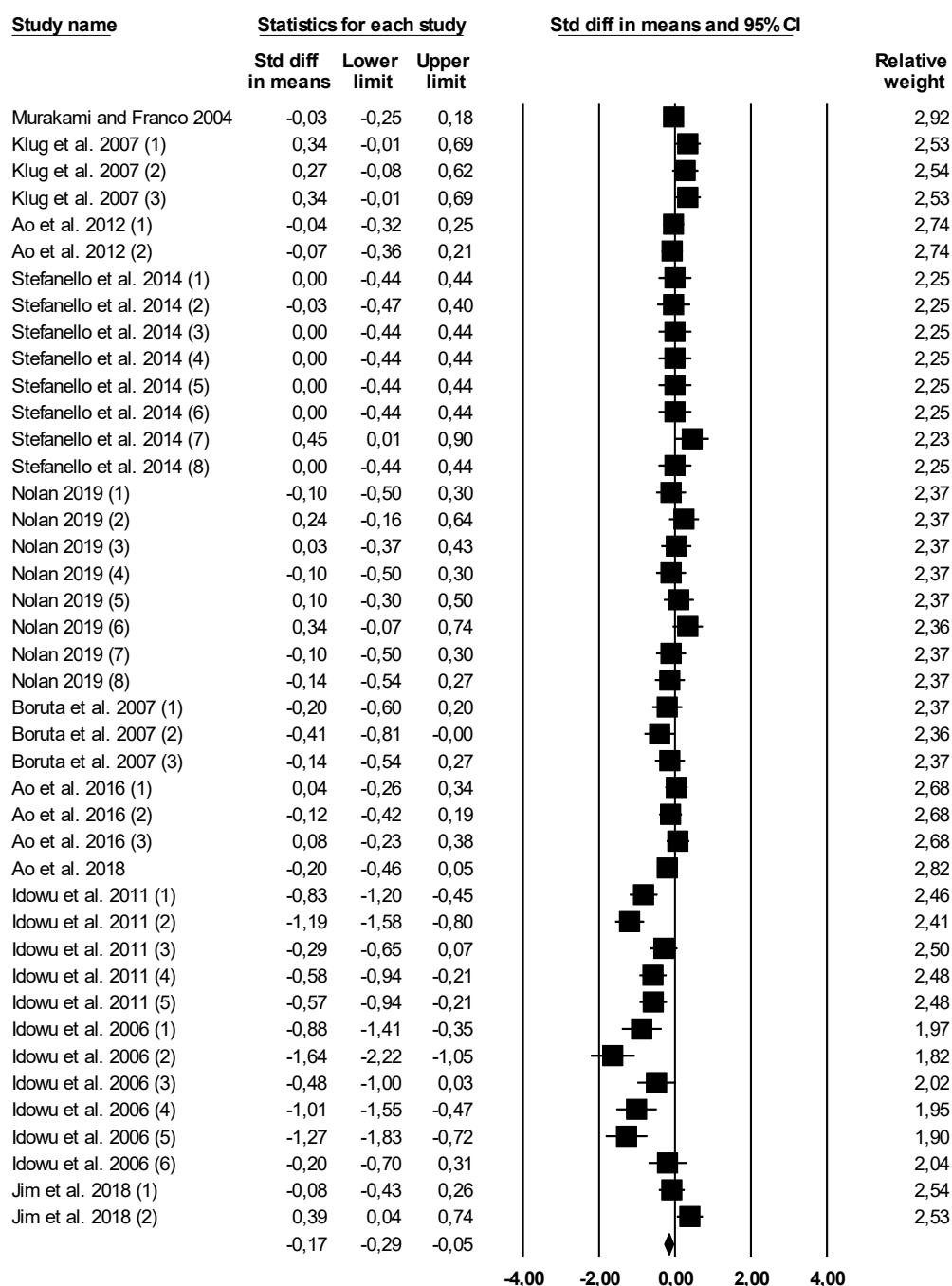


Figure S4: Forest plot of the effect of organic trace mineral supplementation on FCR (g feed/dozen egg) of laying hens. Study name refers to the reference of that study. Raw mean differences (difference in means) represent the effect size estimate. Each square represents the mean effect size for that study. Thus, the squares to the right of the zero mid-line represent a higher FCR, squares to the left of the 0 mid-line indicate a lower FCR and squares at the 0 mid-line indicate no effect on FCR. The upper and lower limit of the line connected

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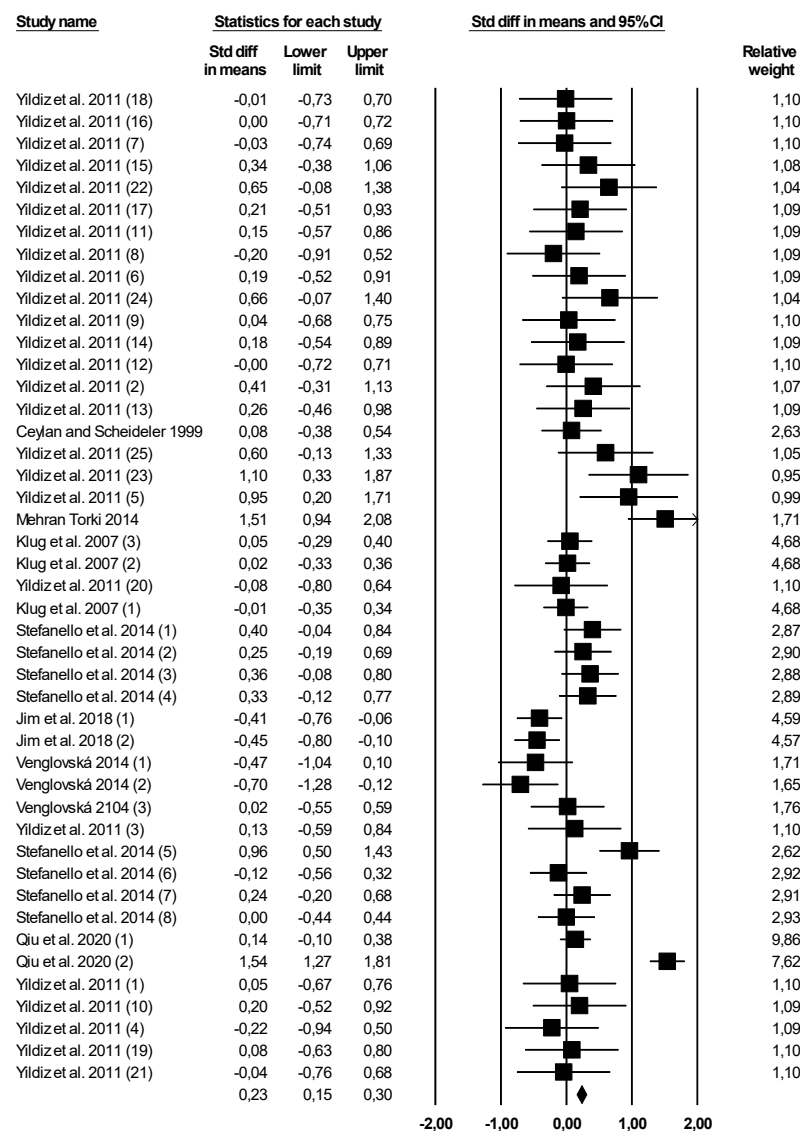


Figure S5: Forest plot of the effect of organic trace mineral supplementation on egg mass (g/hen/day) of laying hens. Study name refers to the reference of that study. Raw mean differences (difference in means) represent the effect size estimate. Each square represents the mean effect size for that study. Thus, the squares to the right of the zero mid-line represent higher egg mass, squares to the left of the 0 mid-line indicate lower egg mass and squares at the 0 mid-line indicate no effect on egg mass. The upper and lower limit of the line connected to the square represents the upper and lower 95% confidence interval (CI) for the effect size. The size of the square reflects the relative weighting of the study to the overall

effect size estimate, with larger squares representing greater weight. The diamond at the bottom represents the overall effect size estimate.

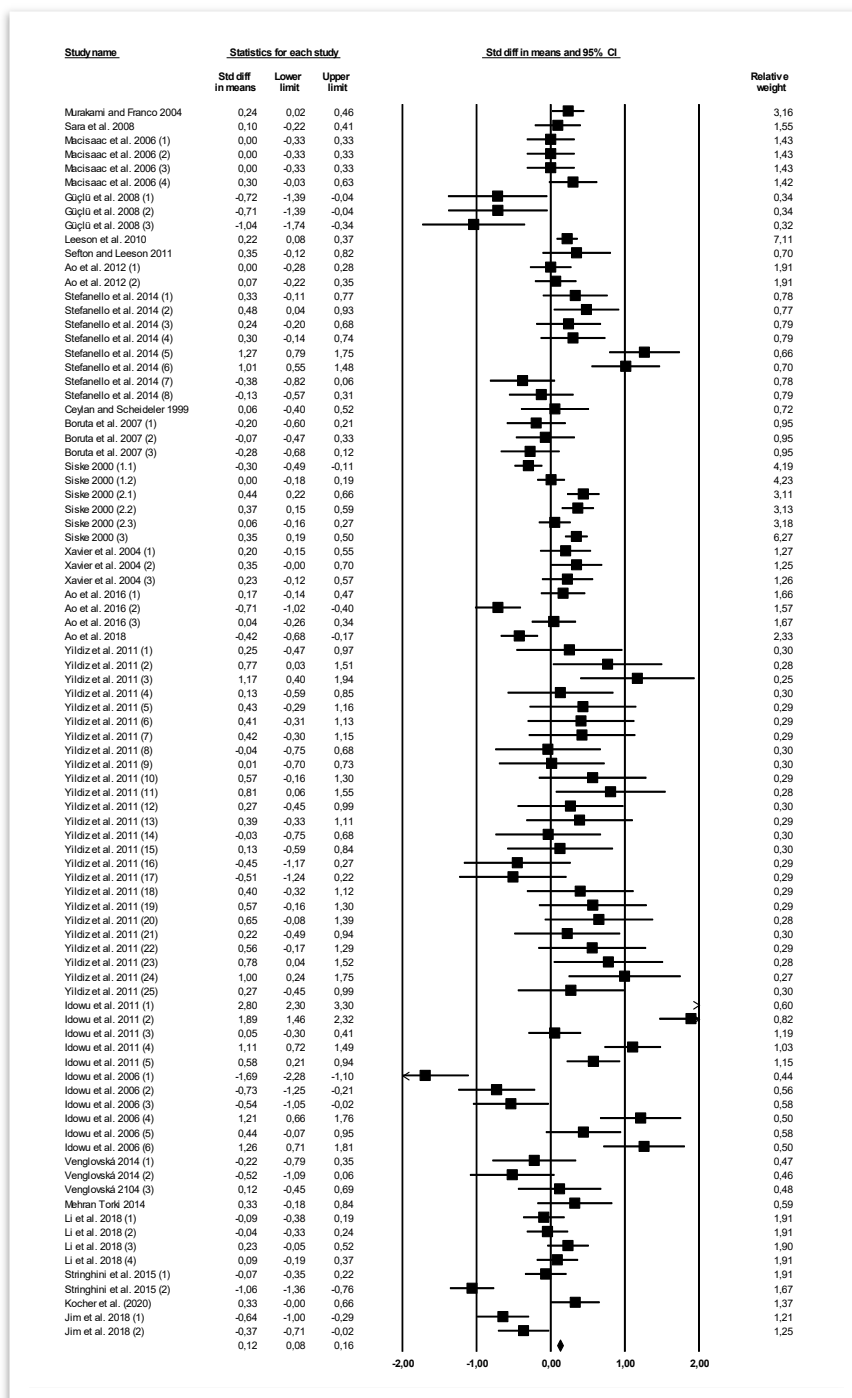


Figure S6: Forest plot of the effect of organic trace mineral supplementation on egg weight (g) of laying hens. Study name refers to the reference of that study. Raw mean differences (difference in means) represent the effect size estimate. Each square represents the mean effect size for that study. Thus, the squares to the right of the zero mid-line represent higher egg weight, squares to the left of the 0 mid-line indicate lower egg weight and squares at the

0 mid-line indicate no effect on egg weight. The upper and lower limit of the line connected to the square represents the upper and lower 95% confidence interval (CI) for the effect size. The size of the square reflects the relative weighting of the study to the overall effect size estimate, with larger squares representing greater weight. The diamond at the bottom represents the overall effect size estimate.

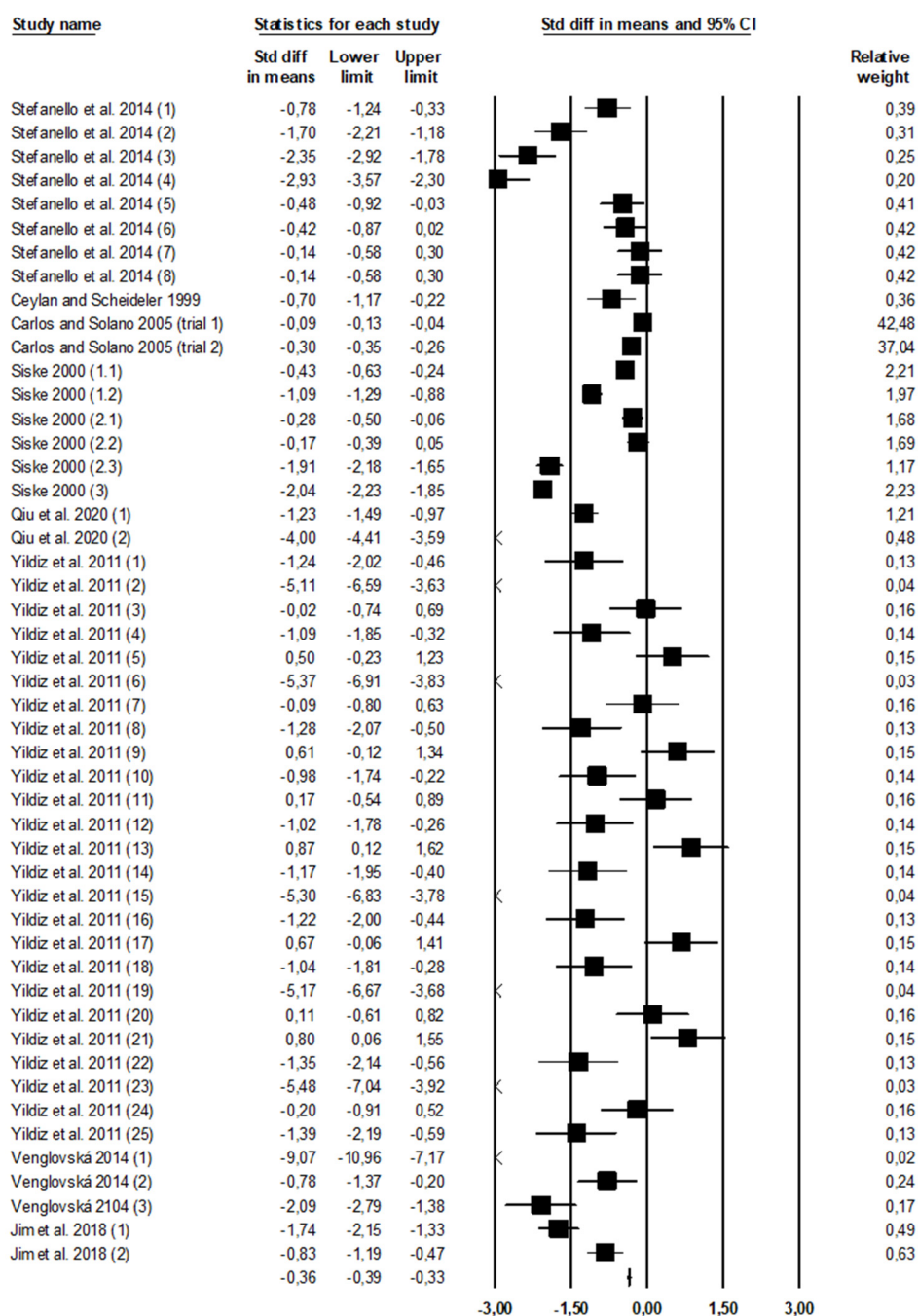


Figure S7: Forest plot of the effect of organic trace mineral supplementation on egg loss (%) of laying hens. Study name refers to the reference of that study. Raw mean differences (difference in means) represent the effect size estimate. Each square represents the mean effect size for that study. Thus, the squares to the right of the zero mid-line represent higher egg loss, squares to the left of the 0 mid-line indicate lower egg loss and squares at the 0 mid-line indicate no effect on egg loss. The upper and lower limit of the line connected to the

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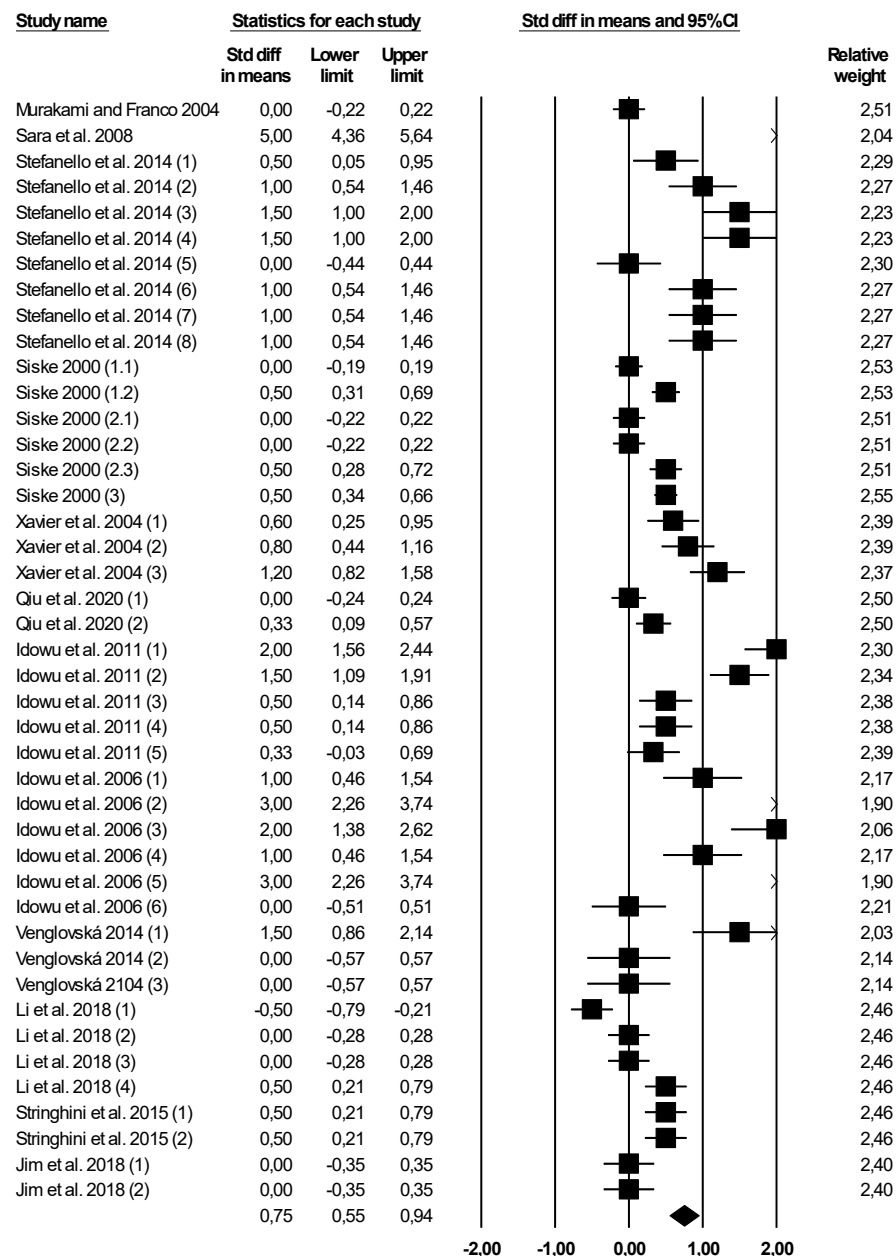


Figure S8: Forest plot of the effect of organic trace mineral supplementation on eggshell thickness (mm) of laying hens. Study name refers to the reference of that study. Raw mean differences (difference in means) represent the effect size estimate. Each square represents the mean effect size for that study. Thus, the squares to the right of the zero mid-line represent higher eggshell thickness, squares to the left of the 0 mid-line indicate lower eggshell thickness and squares at the 0 mid-line indicate no effect on eggshell thickness. The upper and lower limit of the line connected to the square represents the upper and lower 95%

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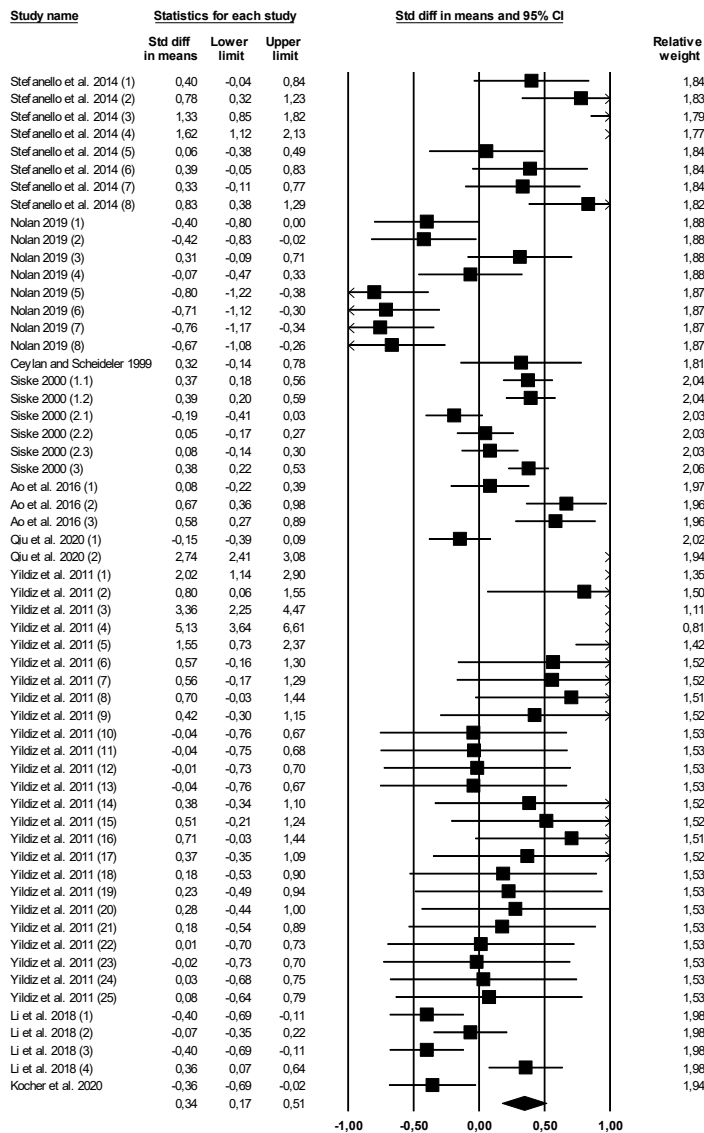


Figure S9: Forest plot of the effect of organic trace mineral supplementation on eggshell strength (kgf) of laying hens. Study name refers to the reference of that study. Raw mean differences (difference in means) represent the effect size estimate. Each square represents the mean effect size for that study. Thus, the squares to the right of the zero mid-line represent higher eggshell strength, squares to the left of the 0 mid-line indicate lower eggshell strength and squares at the 0 mid-line indicate no effect on eggshell strength. The upper and lower limit of the line connected to the square represents the upper and lower 95% confidence interval (CI) for the effect size. The size of the square reflects the relative

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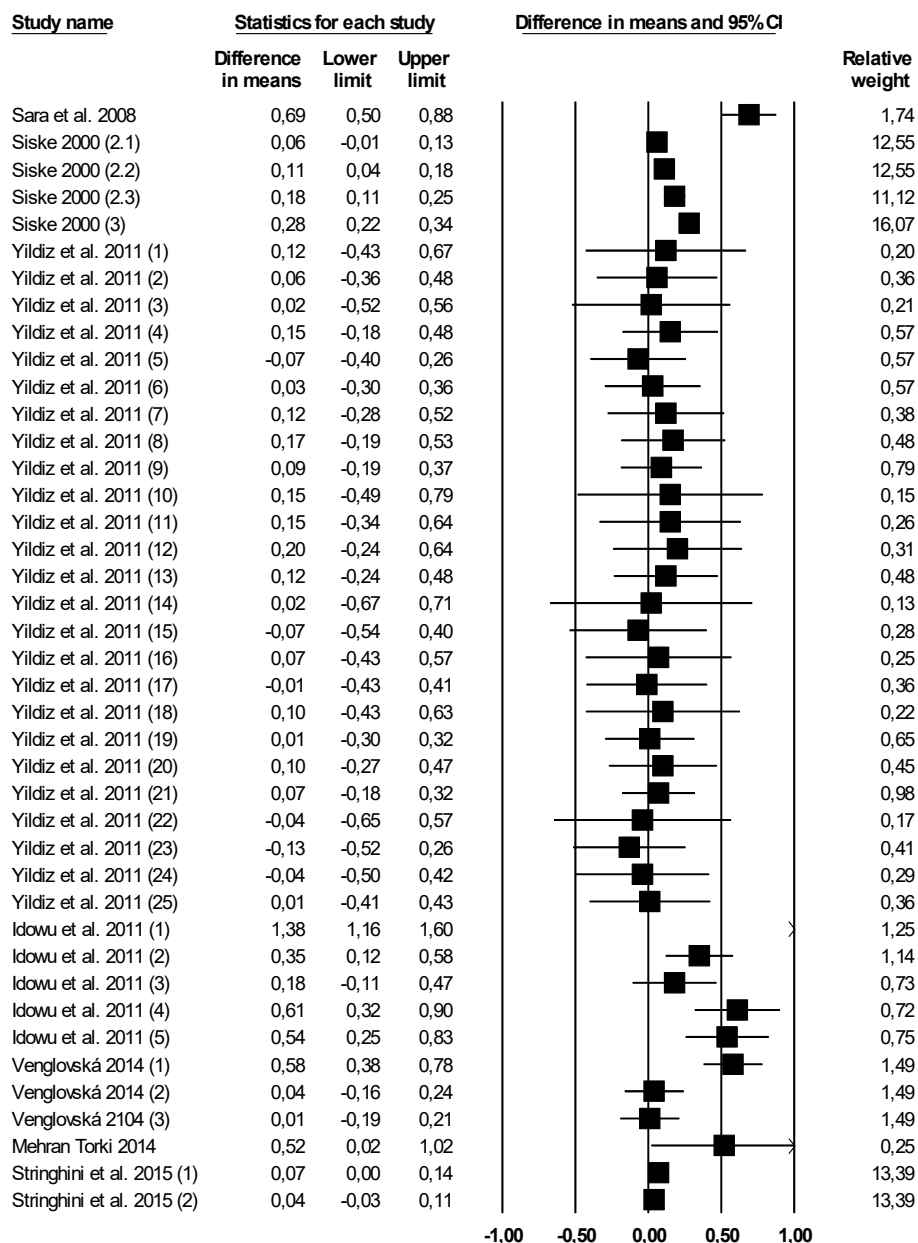


Figure S10: Forest plot of the effect of organic trace mineral supplementation on eggshell weight (g) of laying hens. Study name refers to the reference of that study. Raw mean differences (difference in means) represent the effect size estimate. Each square represents the mean effect size for that study. Thus, the squares to the right of the zero mid-line represent higher eggshell weight, squares to the left of the 0 mid-line indicate lower eggshell weight and squares at the 0 mid-line indicate no effect on eggshell weight. The upper and lower limit of the line connected to the square represents the upper and lower 95%

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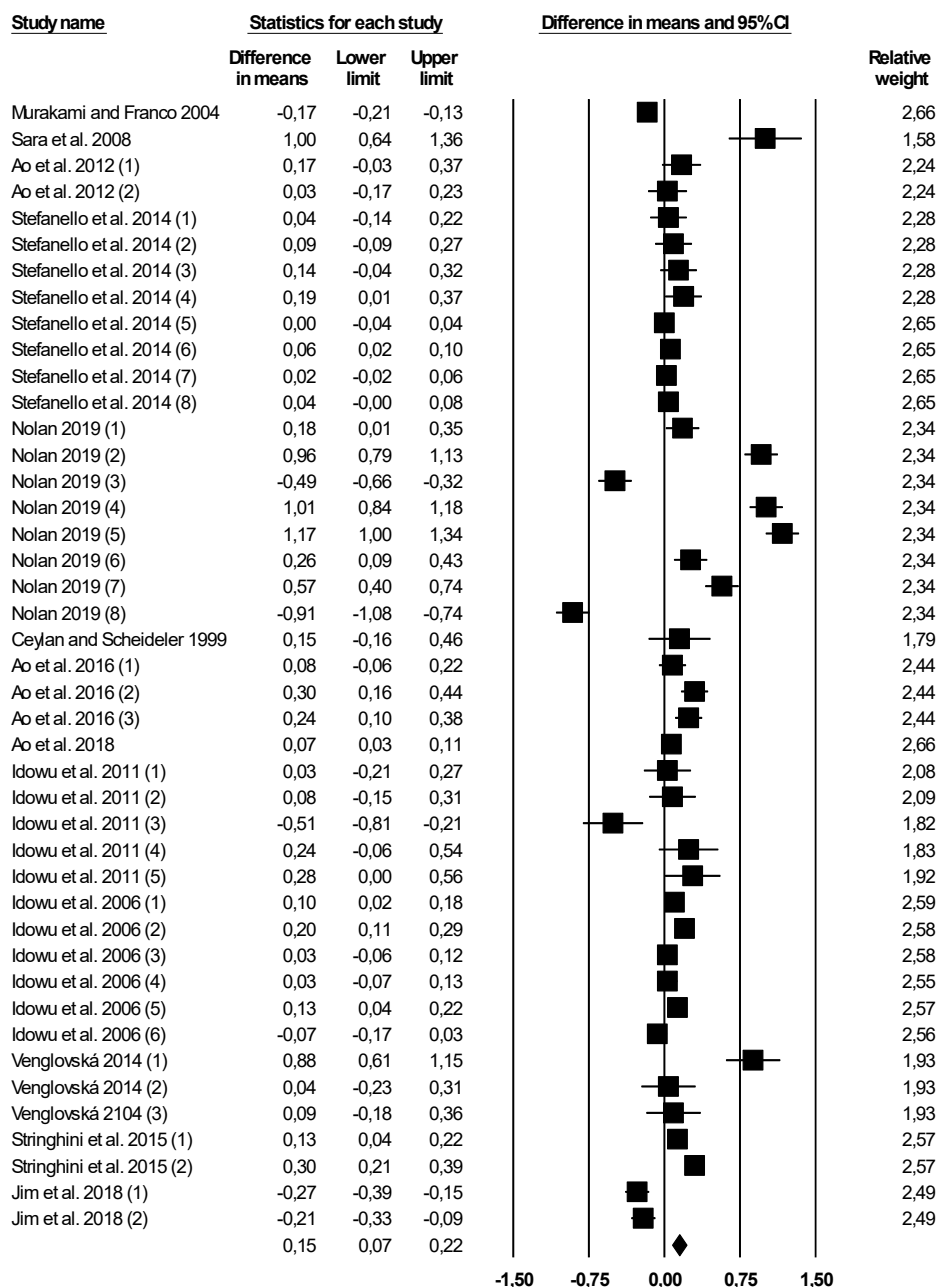


Figure S11: Forest plot of the effect of organic trace mineral supplementation on eggshell percentage (%) of laying hens. Study name refers to the reference of that study. Raw mean differences (difference in means) represent the effect size estimate. Each square represents the mean effect size for that study. Thus, the squares to the right of the zero mid-line represent a higher eggshell percentage, squares to the left of the 0 mid-line indicate a lower eggshell percentage and squares at the 0 mid-line indicate no effect on eggshell percentage.

The upper and lower limit of the line connected to the square represents the upper and lower 95% confidence interval (CI) for the effect size. The size of the square reflects the relative weighting of the study to the overall effect size estimate, with larger squares representing greater weight. The diamond at the bottom represents the overall effect size estimate.

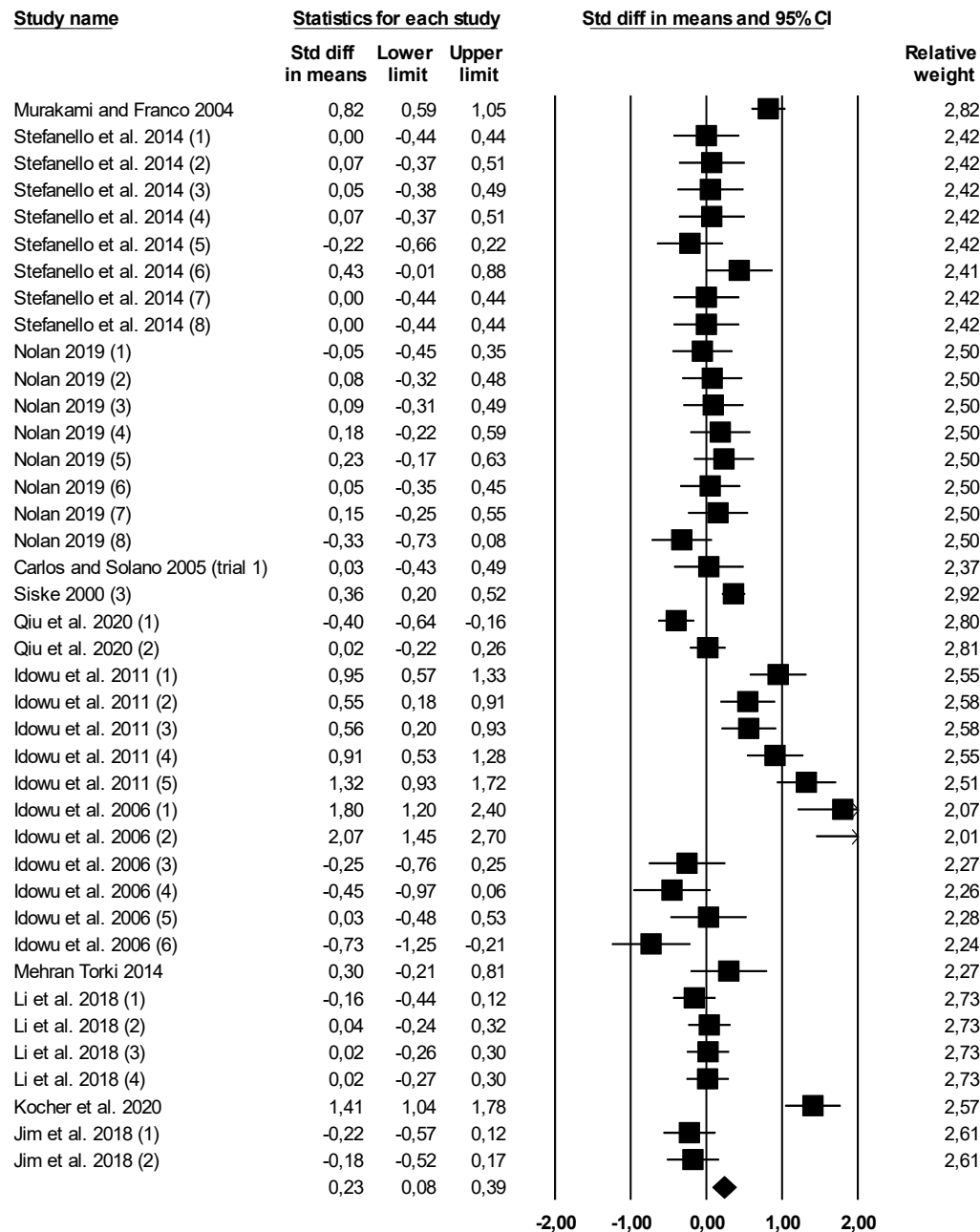


Figure S12: Forest plot of the effect of organic trace mineral supplementation on Haugh unit of laying hens. Study name refers to the reference of that study. Raw mean differences (difference in means) represent the effect size estimate. Each square represents the mean effect size for that study. Thus, the squares to the right of the zero mid-line represent a higher Haugh unit, squares to the left of the 0 mid-line indicate a lower Haugh unit and squares at the 0 mid-line indicate no effect on Haugh unit. The upper and lower limit of the line

connected to the square represents the upper and lower 95% confidence interval (CI) for the effect size. The size of the square reflects the relative weighting of the study to the overall effect size estimate, with larger squares representing greater weight. The diamond at the bottom represents the overall effect size estimate.