## The effect of Jade Dragon Wings organic green tea mass per set volume of distilled water on the growth of Broad bean plant (*Vicia faba*)

## **APPENDIX**

## SEEDLING LENGTH DATA

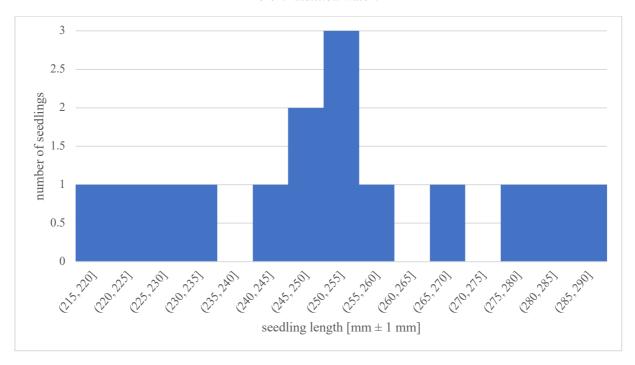
Table 1: raw data for seedling length at different tea masses per set distilled water volume.

| Jade Dragon Wings organic tea mass [ $g \pm 0.05$ g $/100$ cm <sup>3</sup> $\pm$ 5 cm <sup>3</sup> distilled water] | 0.00 | 2.00 | 4.00 | 6.00 | 8.00 | 10.00 |
|---------------------------------------------------------------------------------------------------------------------|------|------|------|------|------|-------|
| seedling length [mm ± 1 mm]                                                                                         | 218  | 221  | 251  | 276  | 304  | 298   |
|                                                                                                                     | 221  | 237  | 256  | 287  | 297  | 304   |
|                                                                                                                     | 230  | 238  | 263  | 299  | 311  | 311   |
|                                                                                                                     | 234  | 251  | 270  | 305  | 317  | 320   |
|                                                                                                                     | 242  | 268  | 281  | 307  | 326  | 328   |
|                                                                                                                     | 246  | 279  | 285  | 307  | 329  | 339   |
|                                                                                                                     | 250  | 283  | 286  | 318  | 330  | 340   |
|                                                                                                                     | 252  | 287  | 291  | 328  | 330  | 342   |
|                                                                                                                     | 252  | 289  | 294  | 331  | 331  | 345   |
|                                                                                                                     | 253  | 293  | 297  | 333  | 338  | 348   |
|                                                                                                                     | 259  | 294  | 302  | 335  | 340  | 353   |
|                                                                                                                     | 270  | 295  | 323  | 340  | 354  | 364   |
|                                                                                                                     | 278  | 296  | 324  | 340  | 369  | 368   |
|                                                                                                                     | 285  | 300  | 331  | 345  | 362  | 372   |
|                                                                                                                     | 286  | 305  | 339  | 353  | 375  | 374   |
|                                                                                                                     | /    | 317  | /    | 358  | 376  | 379   |
|                                                                                                                     | /    | /    | /    | /    | /    | /     |
|                                                                                                                     | /    | /    | /    | /    | /    | /     |
|                                                                                                                     | /    | /    | /    | /    | /    | /     |
|                                                                                                                     | /    | /    | /    | /    | /    | /     |

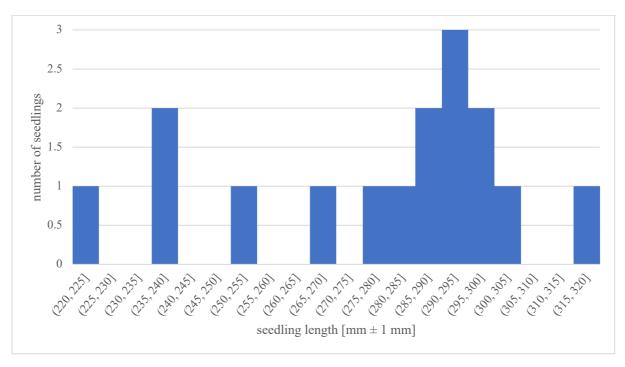
where / means that the planted seed did not germinate.

All histograms, made with Microsoft Excel and used to check for normal distribution are following.

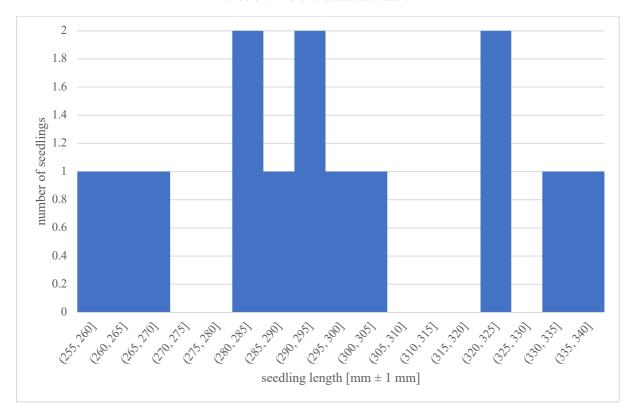
Graph 1: number of seeds within a certain seedling length at 0.00 g Jade Dragon Wings organic tea /100 cm $^3$  ± 5 cm $^3$  distilled water.



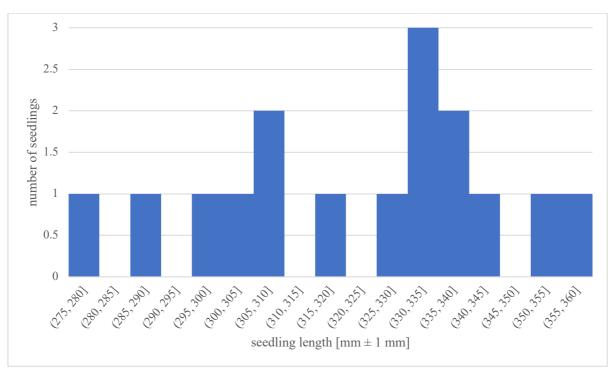
Graph 2: number of seeds within a certain seedling length at 2.00 g  $\pm$  0.05 g Jade Dragon Wings organic tea  $/100 \text{ cm}^3 \pm 5 \text{ cm}^3$  distilled water.



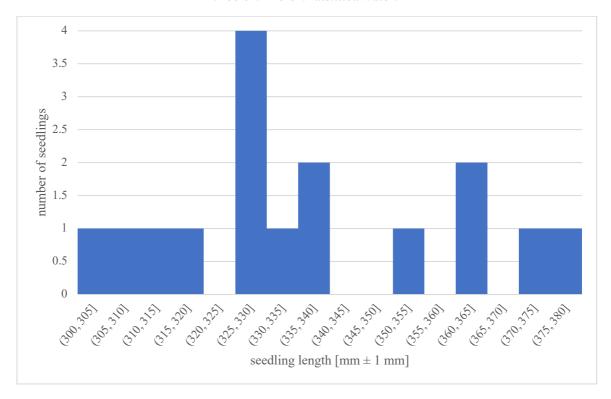
Graph 3: number of seeds within a certain seedling length at  $4.00 \text{ g} \pm 0.05 \text{ g}$  Jade Dragon Wings organic tea  $/100 \text{ cm}^3 \pm 5 \text{ cm}^3$  distilled water.



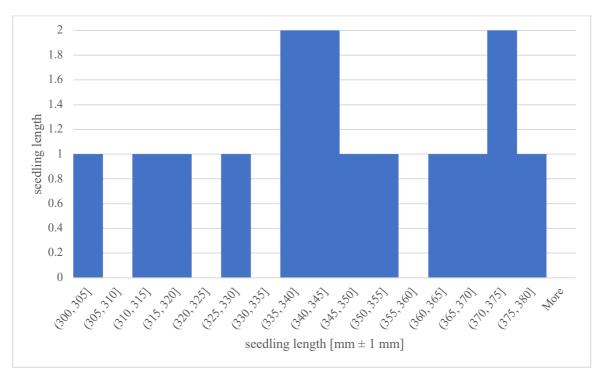
Graph 4: number of seeds within a certain seedling length at 6.00 g  $\pm$  0.05 g Jade Dragon Wings organic tea  $/100 \text{ cm}^3 \pm 5 \text{ cm}^3$  distilled water.



Graph 5: number of seeds within a certain seedling length at  $8.00 \text{ g} \pm 0.05 \text{ g}$  Jade Dragon Wings organic tea  $/100 \text{ cm}^3 \pm 5 \text{ cm}^3$  distilled water.



Graph 6: number of seeds within a certain seedling length at  $10.00 \pm 0.05$  g Jade Dragon Wings organic tea  $/100 \text{ cm}^3 \pm 5 \text{ cm}^3$  distilled water.



## LEAF LENGTH DATA

Table 2: raw data for leaf length at 0.00 g Jade Dragon Wings organic tea /100 cm $^3$   $\pm$  5 cm $^3$  distilled water.

| Jade Dragon Wings organic tea mass [g $\pm$ 0.05 g /100 cm <sup>3</sup> $\pm$ 5 cm <sup>3</sup> distilled water] |    | 0. | 00 |    |
|------------------------------------------------------------------------------------------------------------------|----|----|----|----|
| leaf length [mm ± 1 mm]                                                                                          | 17 | 28 | 33 | 42 |
|                                                                                                                  | 19 | 28 | 33 | 42 |
|                                                                                                                  | 19 | 29 | 33 | 43 |
|                                                                                                                  | 19 | 29 | 34 | 43 |
|                                                                                                                  | 20 | 29 | 34 | 43 |
|                                                                                                                  | 21 | 29 | 35 | 44 |
|                                                                                                                  | 21 | 29 | 35 | 44 |
|                                                                                                                  | 21 | 29 | 35 | 44 |
|                                                                                                                  | 22 | 29 | 35 | 45 |
|                                                                                                                  | 22 | 29 | 35 | 45 |
|                                                                                                                  | 23 | 29 | 36 | 45 |
|                                                                                                                  | 24 | 30 | 36 | 46 |
|                                                                                                                  | 24 | 30 | 36 | 46 |
|                                                                                                                  | 24 | 30 | 36 | 47 |
|                                                                                                                  | 24 | 31 | 37 | 47 |
|                                                                                                                  | 24 | 31 | 37 |    |
|                                                                                                                  | 25 | 31 | 38 |    |
|                                                                                                                  | 25 | 31 | 38 |    |
|                                                                                                                  | 25 | 31 | 38 |    |
|                                                                                                                  | 25 | 32 | 39 |    |
|                                                                                                                  | 26 | 32 | 39 |    |
|                                                                                                                  | 26 | 32 | 41 |    |
|                                                                                                                  | 26 | 32 | 41 |    |
|                                                                                                                  | 27 | 32 | 42 |    |

Table 3: raw data for leaf length at 2.00 g  $\pm$  0.05 g Jade Dragon Wings organic tea /100 cm<sup>3</sup>  $\pm$  5 cm<sup>3</sup> distilled water.

| nde Dragon Wings organic tea mass [g $\pm$ 0.05 g /100 cm <sup>3</sup> $\pm$ 5 cm <sup>3</sup> distilled water] | 2.00 |    |    |    |
|-----------------------------------------------------------------------------------------------------------------|------|----|----|----|
| leaf length [mm ± 1 mm]                                                                                         | 2    | 30 | 40 | 44 |
|                                                                                                                 | 22   | 30 | 40 | 44 |
|                                                                                                                 | 23   | 30 | 40 | 44 |
|                                                                                                                 | 23   | 31 | 40 | 44 |
|                                                                                                                 | 24   | 31 | 41 | 44 |
|                                                                                                                 | 24   | 31 | 41 | 45 |
|                                                                                                                 | 25   | 31 | 41 | 45 |
|                                                                                                                 | 25   | 32 | 41 | 45 |
|                                                                                                                 | 25   | 33 | 41 | 45 |
|                                                                                                                 | 26   | 35 | 41 | 45 |
|                                                                                                                 | 26   | 36 | 41 | 45 |
|                                                                                                                 | 27   | 36 | 41 | 45 |
|                                                                                                                 | 27   | 38 | 42 | 46 |
|                                                                                                                 | 27   | 38 | 42 | 46 |
|                                                                                                                 | 28   | 38 | 42 | 46 |
|                                                                                                                 | 28   | 38 | 42 | 46 |
|                                                                                                                 | 28   | 38 | 42 | 46 |
|                                                                                                                 | 28   | 39 | 42 | 46 |
|                                                                                                                 | 28   | 39 | 42 | 47 |
|                                                                                                                 | 28   | 39 | 42 | 47 |
|                                                                                                                 | 28   | 40 | 43 | 47 |
|                                                                                                                 | 29   | 40 | 43 | 47 |
|                                                                                                                 | 29   | 40 | 44 | 51 |
|                                                                                                                 | 29   | 40 | 44 | 53 |

Table 4: raw data for leaf length at  $4.00 \text{ g} \pm 0.05 \text{ g}$  Jade Dragon Wings organic tea  $/100 \text{ cm}^3 \pm 5 \text{ cm}^3$  distilled water.

| Tade Dragon Wings organic tea mass [g $\pm$ 0.05 g /100 cm <sup>3</sup> $\pm$ 5 cm <sup>3</sup> distilled water] | 4.00 |    |    |    |
|------------------------------------------------------------------------------------------------------------------|------|----|----|----|
| leaf length [mm ± 1 mm]                                                                                          | 22   | 35 | 42 | 47 |
|                                                                                                                  | 24   | 35 | 42 | 47 |
|                                                                                                                  | 25   | 36 | 42 | 47 |
|                                                                                                                  | 25   | 37 | 42 | 47 |
|                                                                                                                  | 25   | 37 | 43 | 47 |
|                                                                                                                  | 26   | 38 | 43 | 47 |
|                                                                                                                  | 27   | 38 | 43 | 48 |
|                                                                                                                  | 27   | 38 | 43 | 48 |
|                                                                                                                  | 28   | 38 | 44 | 48 |
|                                                                                                                  | 28   | 39 | 44 | 49 |
|                                                                                                                  | 28   | 39 | 44 | 49 |
|                                                                                                                  | 29   | 39 | 44 | 50 |
|                                                                                                                  | 29   | 39 | 44 | 50 |
|                                                                                                                  | 29   | 39 | 45 | 51 |
|                                                                                                                  | 30   | 40 | 45 | 51 |
|                                                                                                                  | 30   | 40 | 45 | 52 |
|                                                                                                                  | 31   | 40 | 45 |    |
|                                                                                                                  | 31   | 40 | 45 |    |
|                                                                                                                  | 32   | 40 | 45 |    |
|                                                                                                                  | 32   | 40 | 46 |    |
|                                                                                                                  | 32   | 41 | 46 |    |
|                                                                                                                  | 33   | 41 | 46 |    |
|                                                                                                                  | 34   | 41 | 46 |    |
|                                                                                                                  | 35   | 41 | 46 |    |

Table 5: raw data for leaf length at  $6.00 \text{ g} \pm 0.05 \text{ g}$  Jade Dragon Wings organic tea  $/100 \text{ cm}^3 \pm 5 \text{ cm}^3$  distilled water.

| ade Dragon Wings organic tea mass [g $\pm$ 0.05 g /100 cm <sup>3</sup> $\pm$ 5 cm <sup>3</sup> distilled water] | 6.00 |    |    |    |
|-----------------------------------------------------------------------------------------------------------------|------|----|----|----|
| leaf length [mm ± 1 mm]                                                                                         | 27   | 38 | 45 | 54 |
|                                                                                                                 | 27   | 38 | 45 | 54 |
|                                                                                                                 | 28   | 39 | 45 | 54 |
|                                                                                                                 | 29   | 39 | 45 | 55 |
|                                                                                                                 | 29   | 39 | 46 | 55 |
|                                                                                                                 | 30   | 40 | 46 | 55 |
|                                                                                                                 | 32   | 40 | 46 | 56 |
|                                                                                                                 | 32   | 40 | 47 | 56 |
|                                                                                                                 | 33   | 41 | 48 | 57 |
|                                                                                                                 | 33   | 41 | 49 | 57 |
|                                                                                                                 | 34   | 41 | 49 | 58 |
|                                                                                                                 | 34   | 41 | 50 | 58 |
|                                                                                                                 | 34   | 42 | 50 | 58 |
|                                                                                                                 | 35   | 42 | 50 | 58 |
|                                                                                                                 | 35   | 42 | 51 | 59 |
|                                                                                                                 | 35   | 43 | 51 | 59 |
|                                                                                                                 | 35   | 43 | 51 | 59 |
|                                                                                                                 | 35   | 43 | 51 | 59 |
|                                                                                                                 | 36   | 44 | 52 | 59 |
|                                                                                                                 | 37   | 44 | 52 | 61 |
|                                                                                                                 | 37   | 44 | 53 | 62 |
|                                                                                                                 | 37   | 44 | 53 | 63 |
|                                                                                                                 | 38   | 44 | 53 |    |
|                                                                                                                 | 38   | 45 | 54 |    |

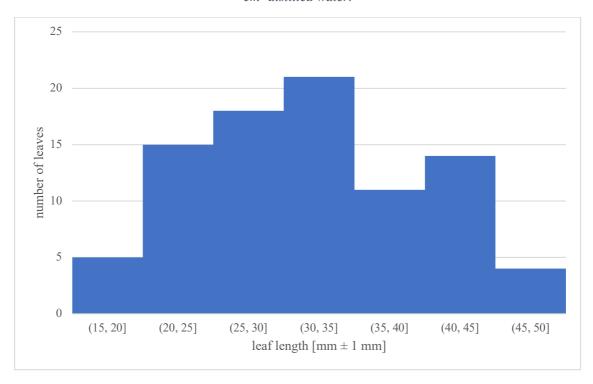
Table 6: raw data for leaf length at  $8.00 \text{ g} \pm 0.05 \text{ g}$  Jade Dragon Wings organic tea  $/100 \text{ cm}^3 \pm 5 \text{ cm}^3$  distilled water.

| Dragon Wings organic tea mass [g $\pm$ 0.05 g /100 cm <sup>3</sup> $\pm$ 5 cm <sup>3</sup> distilled water] | 8.00 |    |    |    |
|-------------------------------------------------------------------------------------------------------------|------|----|----|----|
| leaf length [mm ± 1 mm]                                                                                     | 26   | 42 | 46 | 56 |
|                                                                                                             | 27   | 42 | 46 | 56 |
|                                                                                                             | 28   | 42 | 47 | 57 |
|                                                                                                             | 30   | 42 | 47 | 58 |
|                                                                                                             | 30   | 43 | 48 | 58 |
|                                                                                                             | 31   | 43 | 48 | 58 |
|                                                                                                             | 32   | 43 | 48 | 58 |
|                                                                                                             | 33   | 43 | 49 | 59 |
|                                                                                                             | 33   | 44 | 49 | 59 |
|                                                                                                             | 34   | 44 | 50 | 60 |
|                                                                                                             | 34   | 44 | 51 | 60 |
|                                                                                                             | 34   | 44 | 52 | 60 |
|                                                                                                             | 34   | 44 | 52 | 61 |
|                                                                                                             | 35   | 45 | 52 | 62 |
|                                                                                                             | 36   | 45 | 53 | 62 |
|                                                                                                             | 37   | 45 | 54 | 63 |
|                                                                                                             | 39   | 45 | 54 | 64 |
|                                                                                                             | 40   | 45 | 54 | 65 |
|                                                                                                             | 40   | 45 | 54 | 65 |
|                                                                                                             | 40   | 46 | 54 | 65 |
|                                                                                                             | 41   | 46 | 54 | 66 |
|                                                                                                             | 41   | 46 | 55 | 66 |
|                                                                                                             | 41   | 46 | 55 | 67 |
|                                                                                                             | 41   | 46 | 56 |    |

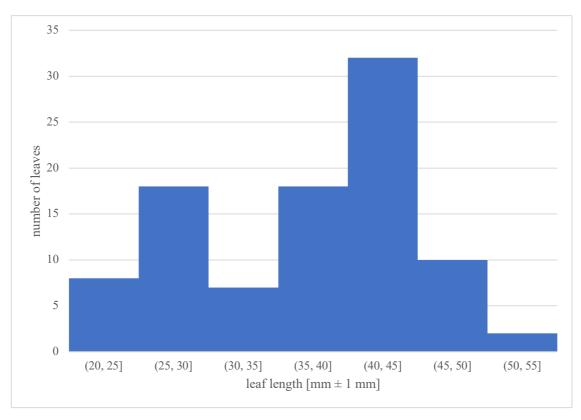
Table 7: raw data for leaf length at  $10.00 \pm 0.05$  g Jade Dragon Wings organic tea /100 cm<sup>3</sup>  $\pm$  5 cm<sup>3</sup> distilled water.

| Jade Dragon Wings organic tea mass [g $\pm$ 0.05 g /100 cm $^3$ $\pm$ 5 cm $^3$ distilled water] | 10.00 |    |    |    |  |
|--------------------------------------------------------------------------------------------------|-------|----|----|----|--|
| leaf length [mm $\pm 1$ mm]                                                                      | 28    | 44 | 52 | 60 |  |
|                                                                                                  | 29    | 45 | 52 | 60 |  |
|                                                                                                  | 30    | 45 | 52 | 60 |  |
|                                                                                                  | 30    | 46 | 53 | 60 |  |
|                                                                                                  | 30    | 46 | 53 | 60 |  |
|                                                                                                  | 31    | 46 | 53 | 61 |  |
|                                                                                                  | 31    | 47 | 54 | 61 |  |
|                                                                                                  | 32    | 47 | 54 | 61 |  |
|                                                                                                  | 33    | 47 | 54 | 61 |  |
|                                                                                                  | 34    | 47 | 54 | 61 |  |
|                                                                                                  | 34    | 47 | 54 | 61 |  |
|                                                                                                  | 34    | 47 | 55 | 62 |  |
|                                                                                                  | 34    | 48 | 56 | 62 |  |
|                                                                                                  | 34    | 48 | 56 | 64 |  |
|                                                                                                  | 35    | 49 | 56 |    |  |
|                                                                                                  | 36    | 49 | 57 |    |  |
|                                                                                                  | 37    | 49 | 57 |    |  |
|                                                                                                  | 38    | 49 | 58 |    |  |
|                                                                                                  | 42    | 49 | 58 |    |  |
|                                                                                                  | 43    | 50 | 58 |    |  |
|                                                                                                  | 43    | 50 | 59 |    |  |
|                                                                                                  | 44    | 50 | 59 |    |  |
|                                                                                                  | 44    | 50 | 59 |    |  |
|                                                                                                  | 44    | 50 | 60 |    |  |

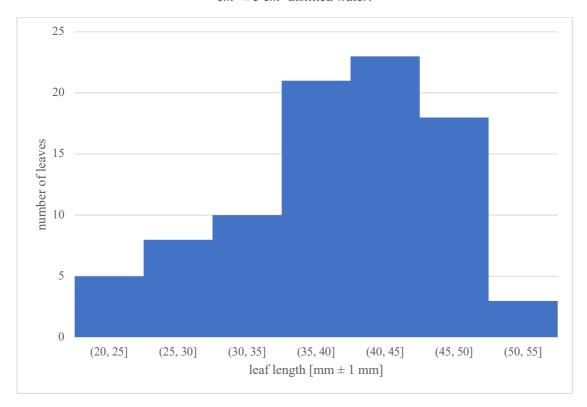
Graph 7: number of leaves within a certain leaf length at 0.00 g Jade Dragon Wings organic tea /100 cm $^3$   $\pm$  5 cm $^3$  distilled water.



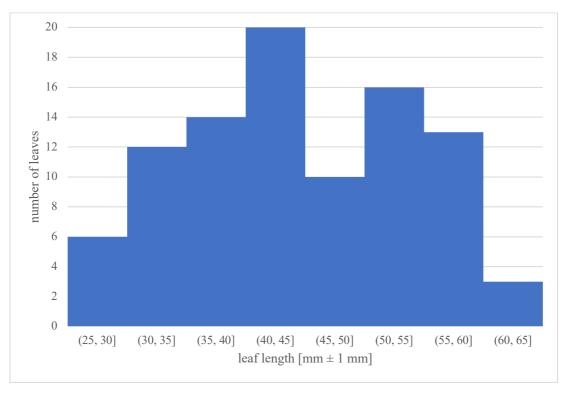
Graph 8: number of leaves within a certain leaf length at 2.00 g  $\pm$  0.05 g Jade Dragon Wings organic tea /100 cm<sup>3</sup>  $\pm$  5 cm<sup>3</sup> distilled water.



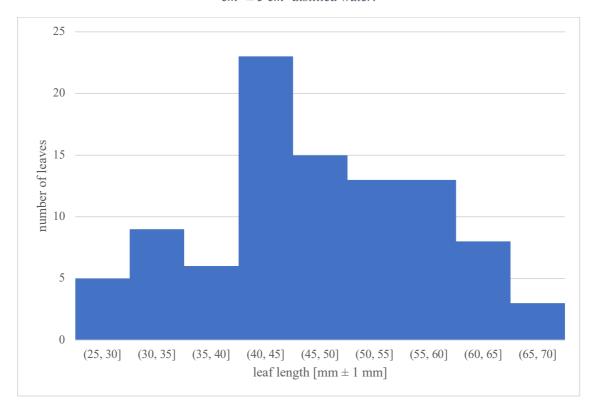
Graph 9: number of leaves within a certain leaf length at 4.00 g  $\pm$  0.05 g Jade Dragon Wings organic tea /100 cm<sup>3</sup>  $\pm$  5 cm<sup>3</sup> distilled water.



Graph 10: number of leaves within a certain leaf length at 6.00 g  $\pm$  0.05 g Jade Dragon Wings organic tea /100  $cm^3 \pm 5$  cm<sup>3</sup> distilled water.



Graph 11: number of leaves within a certain leaf length at 8.00 g  $\pm$  0.05 g Jade Dragon Wings organic tea /100 cm<sup>3</sup>  $\pm$  5 cm<sup>3</sup> distilled water.



Graph 12: number of leaves within a certain leaf length at 10.00 g  $\pm$  0.05 g Jade Dragon Wings organic tea /100  $cm^3 \pm 5$   $cm^3$  distilled water.

