

# Experimental Evidence Questions the Relationship between Stress and Fluctuating Asymmetry in Plants

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## Supplementary materials: Data S2

### Part 1. Biomass of experimental plants

Plain text format; columns separated by spaces; missing values coded by full stops.

Column 1: Experimental treatment.

Column 2: Plant number.

Column 3: Plant gry weight, cucumber (g)

Column 4: Plant gry weight, sweet pepper (g)

Column 5: Plant gry weight, common bean (g)

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control 1 123.44 172.15 201.83
control 2 123.95 172.25 194.15
control 3 100.35 174.16 204.87
control 4 99.72 171.07 187.91
control 5 117.60 171.88 203.23
control 6 129.14 171.90 191.26
control 7 117.12 172.75 189.53
control 8 132.68 171.33 197.91
control 9 121.25 163.09 189.04
control 10 101.01 170.15 183.85
control 11 106.68 172.62 202.65
control 12 122.66 173.55 196.39
control 13 125.19 171.15 194.84
control 14 97.70 170.31 183.81
control 15 122.16 . 190.70
copper 1 108.41 171.59 194.08
copper 2 123.32 171.70 202.91
copper 3 135.19 174.06 187.07
copper 4 135.19 167.66 191.15
copper 5 93.40 171.51 196.57
copper 6 137.56 170.67 187.07
copper 7 125.02 169.21 202.30
copper 8 127.26 170.03 192.25
copper 9 103.08 169.42 193.28
copper 10 133.11 167.87 193.01
copper 11 125.52 170.08 192.21
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copper 12 119.63 171.04 195.61  
copper 13 113.62 170.24 191.12  
copper 14 140.08 171.05 199.32  
copper 15 111.36 171.90 .  
nickel 1 111.87 172.75 181.33  
nickel 2 116.76 176.62 186.38  
nickel 3 99.71 172.13 188.68  
nickel 4 96.47 172.88 188.24  
nickel 5 116.80 171.55 191.86  
nickel 6 123.30 174.99 191.72  
nickel 7 128.43 168.64 187.86  
nickel 8 120.70 171.09 185.99  
nickel 9 123.00 168.65 196.48  
nickel 10 100.22 169.83 187.65  
nickel 11 124.05 170.28 188.88  
nickel 12 121.99 170.59 190.27  
nickel 13 122.2 169.57 180.90  
nickel 14 110.24 169.31 180.20  
nickel 15 100.00 168.70 .  
twometals 1 104.49 170.53 193.08  
twometals 2 114.83 167.24 193.37  
twometals 3 100.78 167.01 188.09  
twometals 4 117.04 164.50 185.06  
twometals 5 111.95 165.80 184.79  
twometals 6 123.76 167.94 182.34  
twometals 7 124.99 168.02 180.52  
twometals 8 110.40 168.35 187.21  
twometals 9 100.52 168.23 180.16  
twometals 10 104.96 170.14 179.27  
twometals 11 95.89 167.06 181.42  
twometals 12 108.46 167.58 186.65  
twometals 13 82.76 172.82 184.94  
twometals 14 93.34 169.65 .  
twometals 15 102.24 173.45 .

## Part 2. Size of right and left leaf halves

Plain text format; columns separated by spaces; missing values coded by full stops.

Column 1: Plant species.

Column 2: Image code.

Column 3: Experimental treatment.

Column 4: Plant number.

Column 5: Leaf code or number.

Column 6: Leaf size, left half, first measurement (mm).

Column 7: Leaf size, right half, first measurement (mm).

Column 8: Leaf size, left half, second measurement (mm).

Column 9: Leaf size, right half, second measurement (mm).

cucumber 22-1 control 1 small 61.09 58.21 59.81 57.88  
cucumber 22-1 control 1 medium 62.79 53.90 63.52 53.53

cucumber 22-1 control 1 large 74.22 69.64 74.31 69.96  
 cucumber 22-2 control 2 small 43.65 48.31 44.09 48.30  
 cucumber 22-2 control 2 medium 70.28 63.21 71.37 62.97  
 cucumber 22-2 control 2 large 86.88 82.81 87.11 83.39  
 cucumber 22-3 control 3 small 51.02 50.25 52.12 50.09  
 cucumber 22-3 control 3 medium 48.73 54.06 48.67 54.11  
 cucumber 22-3 control 3 large 64.27 61.85 64.22 62.71  
 cucumber 22-4 control 4 small 48.14 46.87 48.56 47.34  
 cucumber 22-4 control 4 medium 78.45 67.19 79.41 66.98  
 cucumber 22-4 control 4 large 88.91 84.12 89.74 84.34  
 cucumber 22-5 control 5 small 40.09 40.26 40.79 40.85  
 cucumber 22-5 control 5 medium 50.21 56.01 50.19 55.60  
 cucumber 22-5 control 5 large 67.53 72.06 67.62 71.78  
 cucumber 22-6 control 6 small 48.60 48.35 49.08 47.87  
 cucumber 22-6 control 6 medium 59.36 57.71 59.64 57.70  
 cucumber 22-6 control 6 large 82.60 69.05 82.72 70.00  
 cucumber 22-7 control 7 small 45.85 46.53 45.82 45.67  
 cucumber 22-7 control 7 medium 58.64 52.46 58.34 52.84  
 cucumber 22-7 control 7 large 65.58 57.58 65.84 57.85  
 cucumber 22-8 control 8 small 47.63 46.06 48.24 46.32  
 cucumber 22-8 control 8 medium 68.04 66.64 68.57 67.24  
 cucumber 22-8 control 8 large 77.35 77.65 78.67 78.81  
 cucumber 22-9 control 9 small 29.59 44.88 29.53 44.68  
 cucumber 22-9 control 9 medium 68.71 75.36 68.29 75.88  
 cucumber 22-9 control 9 large 70.96 83.11 72.00 83.50  
 cucumber 22-10 control 10 small 40.26 46.70 39.23 46.33  
 cucumber 22-10 control 10 medium 53.98 60.67 54.19 61.02  
 cucumber 22-10 control 10 large 77.73 88.74 76.85 89.22  
 cucumber 22-11 control 11 small 42.17 46.15 42.70 46.07  
 cucumber 22-11 control 11 medium 45.09 47.84 45.01 48.41  
 cucumber 22-11 control 11 large 73.84 77.01 75.08 77.37  
 cucumber 22-12 control 12 small 37.51 37.04 38.72 37.62  
 cucumber 22-12 control 12 medium 47.50 47.38 47.66 46.87  
 cucumber 22-12 control 12 large 59.19 54.49 58.56 54.62  
 cucumber 22-13 control 13 small 35.52 29.55 35.88 30.03  
 cucumber 22-13 control 13 medium 48.77 45.39 48.92 45.46  
 cucumber 22-13 control 13 large 56.27 58.30 56.30 58.78  
 cucumber 22-14 control 14 small 39.67 46.32 40.29 46.97  
 cucumber 22-14 control 14 medium 55.55 54.15 55.54 55.07  
 cucumber 22-14 control 14 large 60.33 70.91 60.79 71.04  
 cucumber 22-15 control 15 small 37.60 38.87 37.42 39.17  
 cucumber 22-15 control 15 medium 51.52 46.06 51.30 45.91  
 cucumber 22-15 control 15 large 67.49 64.18 67.46 64.62  
 cucumber 1 copper 1 small 49.79 50.85 49.97 50.50  
 cucumber 1 copper 1 medium 57.54 75.78 57.52 75.75  
 cucumber 1 copper 1 large 82.30 84.89 81.94 85.08  
 cucumber 2 copper 2 small 48.31 50.13 48.80 50.20  
 cucumber 2 copper 2 medium 43.82 59.61 43.84 59.76  
 cucumber 2 copper 2 large 83.74 78.83 83.95 79.27  
 cucumber 3 copper 3 small 53.62 46.84 53.01 48.05

cucumber 3 copper 3 medium 62.45 63.42 62.46 64.56  
 cucumber 3 copper 3 large 63.51 64.10 64.13 63.64  
 cucumber 4 copper 4 small 40.64 42.38 41.59 42.13  
 cucumber 4 copper 4 medium 51.23 57.41 51.33 57.26  
 cucumber 4 copper 4 large 71.21 76.33 70.78 77.12  
 cucumber 5 copper 5 small 36.96 37.21 36.28 38.72  
 cucumber 5 copper 5 medium 46.06 51.52 46.25 51.97  
 cucumber 5 copper 5 large 58.64 62.66 58.58 62.86  
 cucumber 6 copper 6 small 46.44 44.58 46.29 45.31  
 cucumber 6 copper 6 medium 49.07 51.14 49.37 51.38  
 cucumber 6 copper 6 large 66.22 67.74 66.80 68.87  
 cucumber 7 copper 7 small 42.76 45.09 43.64 44.89  
 cucumber 7 copper 7 medium 54.87 54.49 53.98 54.93  
 cucumber 7 copper 7 large 57.37 57.20 56.64 57.59  
 cucumber 8 copper 8 small 35.82 40.26 36.42 40.76  
 cucumber 8 copper 8 medium 47.80 49.07 47.90 49.13  
 cucumber 8 copper 8 large 64.73 68.42 64.95 69.05  
 cucumber 9 copper 9 small 40.52 42.97 40.11 43.72  
 cucumber 9 copper 9 medium . . . .  
 cucumber 9 copper 9 large 83.95 79.47 83.27 79.68  
 cucumber 10 copper 10 small 35.61 36.58 35.71 36.68  
 cucumber 10 copper 10 medium 57.62 51.91 57.56 53.09  
 cucumber 10 copper 10 large 80.19 77.39 78.95 77.83  
 cucumber 11 copper 11 small 36.88 36.96 37.68 37.31  
 cucumber 11 copper 11 medium 56.56 69.52 57.03 70.50  
 cucumber 11 copper 11 large 81.20 88.36 81.75 88.67  
 cucumber 12 copper 12 small 39.20 31.88 39.55 32.69  
 cucumber 12 copper 12 medium 65.92 69.35 66.63 70.10  
 cucumber 12 copper 12 large 89.12 84.21 88.84 84.25  
 cucumber 13 copper 13 small 38.36 43.23 38.24 43.22  
 cucumber 13 copper 13 medium 38.95 43.14 39.65 43.06  
 cucumber 13 copper 13 large 51.10 47.29 51.40 47.11  
 cucumber 14 copper 14 small 27.86 29.17 29.25 30.22  
 cucumber 14 copper 14 medium 41.07 41.32 41.74 40.85  
 cucumber 14 copper 14 large 77.43 68.12 77.41 68.70  
 cucumber 15 copper 15 small 52.24 49.79 52.60 49.02  
 cucumber 15 copper 15 medium 63.84 63.72 64.53 64.21  
 cucumber 15 copper 15 large 75.02 75.49 73.97 76.11  
 cucumber 33-1 nickel 1 small 48.86 51.14 49.43 50.85  
 cucumber 33-1 nickel 1 medium 71.17 73.75 70.93 73.99  
 cucumber 33-1 nickel 1 large 74.43 84.55 74.92 84.55  
 cucumber 33-2 nickel 2 small 57.07 56.18 56.99 57.19  
 cucumber 33-2 nickel 2 medium 68.04 58.13 68.84 58.09  
 cucumber 33-2 nickel 2 large 86.45 84.38 87.21 84.30  
 cucumber 33-3 nickel 3 small 52.37 49.70 53.14 50.26  
 cucumber 33-3 nickel 3 medium 59.65 57.15 59.99 57.96  
 cucumber 33-3 nickel 3 large 71.55 70.15 72.39 71.05  
 cucumber 33-4 nickel 4 small 57.03 49.15 57.87 49.28  
 cucumber 33-4 nickel 4 medium 60.84 65.37 61.76 65.54  
 cucumber 33-4 nickel 4 large 83.19 71.51 83.78 71.14

cucumber 33-5 nickel 5 small 50.59 45.60 51.28 46.09  
 cucumber 33-5 nickel 5 medium 68.37 68.59 69.02 69.43  
 cucumber 33-5 nickel 5 large 79.09 77.90 79.60 77.78  
 cucumber 33-6 nickel 6 small 42.46 40.73 43.31 41.42  
 cucumber 33-6 nickel 6 medium 56.22 56.01 56.69 56.31  
 cucumber 33-6 nickel 6 large 61.85 61.81 62.62 62.27  
 cucumber 33-7 nickel 7 small 45.72 46.78 45.92 47.12  
 cucumber 33-7 nickel 7 medium 47.59 52.03 48.64 51.48  
 cucumber 33-7 nickel 7 large 59.27 68.20 60.06 69.04  
 cucumber 33-8 nickel 8 small 38.61 33.91 38.48 33.67  
 cucumber 33-8 nickel 8 medium 63.97 65.58 63.20 66.49  
 cucumber 33-8 nickel 8 large 75.11 82.77 74.77 82.49  
 cucumber 33-9 nickel 9 small 44.20 48.22 44.56 48.86  
 cucumber 33-9 nickel 9 medium 68.71 72.78 69.51 73.47  
 cucumber 33-9 nickel 9 large 87.64 92.29 87.69 91.65  
 cucumber 33-10 nickel 10 small 34.50 38.23 35.24 38.25  
 cucumber 33-10 nickel 10 medium 49.24 50.93 50.10 51.40  
 cucumber 33-10 nickel 10 large 61.30 65.96 61.11 65.79  
 cucumber 33-11 nickel 11 small 30.82 28.32 31.72 28.52  
 cucumber 33-11 nickel 11 medium 52.58 50.13 53.31 50.64  
 cucumber 33-11 nickel 11 large 57.45 61.81 57.73 62.51  
 cucumber 33-12 nickel 12 small 42.04 39.88 42.51 39.56  
 cucumber 33-12 nickel 12 medium 54.61 52.96 55.51 52.96  
 cucumber 33-12 nickel 12 large 69.81 56.35 68.73 57.36  
 cucumber 33-13 nickel 13 small 39.71 42.17 40.65 42.06  
 cucumber 33-13 nickel 13 medium 53.47 55.21 53.89 55.05  
 cucumber 33-13 nickel 13 large 69.35 73.96 70.50 74.05  
 cucumber 33-14 nickel 14 small 44.07 44.45 45.35 44.25  
 cucumber 33-14 nickel 14 medium 55.33 55.42 55.55 55.47  
 cucumber 33-14 nickel 14 large 71.80 61.90 72.26 62.87  
 cucumber 33-15 nickel 15 small 48.56 59.53 48.97 59.99  
 cucumber 33-15 nickel 15 medium 65.92 71.21 65.43 71.24  
 cucumber 33-15 nickel 15 large 82.30 87.72 83.03 87.34  
 cucumber 11-1 twometals 1 small 44.83 46.27 45.55 45.09  
 cucumber 11-1 twometals 1 medium 62.15 66.85 62.77 66.28  
 cucumber 11-1 twometals 1 large 68.63 77.27 68.77 77.52  
 cucumber 11-2 twometals 2 small 43.27 47.29 43.97 47.11  
 cucumber 11-2 twometals 2 medium 58.89 57.75 59.23 58.16  
 cucumber 11-2 twometals 2 large 54.66 60.25 56.00 61.11  
 cucumber 11-3 twometals 3 small 54.36 50.55 55.21 50.35  
 cucumber 11-3 twometals 3 medium 65.50 71.30 66.83 71.16  
 cucumber 11-3 twometals 3 large 72.95 79.85 73.00 79.96  
 cucumber 11-4 twometals 4 small 35.01 36.45 36.21 35.84  
 cucumber 11-4 twometals 4 medium 61.90 57.87 62.07 58.92  
 cucumber 11-4 twometals 4 large 84.59 81.12 85.75 80.99  
 cucumber 11-5 twometals 5 small 36.75 33.23 37.04 33.72  
 cucumber 11-5 twometals 5 medium 63.84 59.57 63.87 60.46  
 cucumber 11-5 twometals 5 large 81.37 82.09 80.94 82.41  
 cucumber 11-6 twometals 6 small 45.77 48.56 47.58 48.40  
 cucumber 11-6 twometals 6 medium 64.35 63.97 65.28 64.12

cucumber 11-6 twometals 6 large 73.62 74.39 75.21 74.64  
 cucumber 11-7 twometals 7 small 39.08 37.98 39.81 38.62  
 cucumber 11-7 twometals 7 medium 49.87 48.86 49.16 49.35  
 cucumber 11-7 twometals 7 large 70.83 66.22 72.05 66.52  
 cucumber 11-8 twometals 8 small 40.86 45.81 41.30 45.78  
 cucumber 11-8 twometals 8 medium 63.67 65.58 63.73 65.97  
 cucumber 11-8 twometals 8 large 72.52 71.51 72.32 71.51  
 cucumber 11-9 twometals 9 small 56.01 55.04 56.32 55.07  
 cucumber 11-9 twometals 9 medium 72.44 75.87 71.52 75.57  
 cucumber 11-9 twometals 9 large 76.59 80.82 77.94 81.33  
 cucumber 11-10 twometals 10 small 64.78 63.72 64.20 65.06  
 cucumber 11-10 twometals 10 medium 73.41 77.98 73.65 77.58  
 cucumber 11-10 twometals 10 large 81.20 76.16 80.69 76.24  
 cucumber 11-11 twometals 11 small 57.75 61.26 57.88 62.03  
 cucumber 11-11 twometals 11 medium 50.13 53.43 50.98 54.16  
 cucumber 11-11 twometals 11 large 67.65 65.96 68.03 66.60  
 cucumber 11-12 twometals 12 small 52.41 55.00 53.14 55.75  
 cucumber 11-12 twometals 12 medium 64.90 69.01 65.72 69.34  
 cucumber 11-12 twometals 12 large 75.95 77.01 76.04 76.69  
 cucumber 11-13 twometals 13 small 43.99 42.85 44.19 43.55  
 cucumber 11-13 twometals 13 medium 59.14 63.34 58.70 64.46  
 cucumber 11-13 twometals 13 large 71.13 70.36 70.56 71.37  
 cucumber 11-14 twometals 14 small 36.45 42.89 37.90 43.60  
 cucumber 11-14 twometals 14 medium 59.91 60.46 60.68 60.50  
 cucumber 11-14 twometals 14 large 73.88 65.20 74.76 65.05  
 cucumber 11-15 twometals 15 small 53.56 51.48 54.53 50.86  
 cucumber 11-15 twometals 15 medium 68.08 64.27 68.29 64.00  
 cucumber 11-15 twometals 15 large 72.82 60.84 73.06 61.48  
 pepper 11-1 control 1 1 19.34 18.75 19.13 18.79  
 pepper 11-1 control 1 2 17.65 18.20 17.56 18.28  
 pepper 11-1 control 1 3 17.39 18.37 17.18 18.49  
 pepper 11-2 control 2 1 17.60 17.39 17.39 17.52  
 pepper 11-2 control 2 2 20.31 18.32 20.23 18.54  
 pepper 11-2 control 2 3 18.15 19.21 18.20 19.17  
 pepper 11-3 control 3 1 19.00 20.86 18.79 20.99  
 pepper 11-3 control 3 2 20.19 21.41 20.02 21.50  
 pepper 11-3 control 3 3 15.87 16.76 15.95 16.76  
 pepper 11-4 control 4 1 21.20 22.13 21.37 22.22  
 pepper 11-4 control 4 2 22.13 24.12 21.88 24.12  
 pepper 11-4 control 4 3 20.78 19.17 20.78 19.21  
 pepper 11-5 control 5 1 19.81 19.68 19.59 19.76  
 pepper 11-5 control 5 2 19.09 18.58 19.17 18.54  
 pepper 11-5 control 5 3 19.81 21.29 19.93 21.24  
 pepper 11-6 control 6 1 17.05 15.53 17.14 15.45  
 pepper 11-6 control 6 2 16.38 15.83 16.46 15.66  
 pepper 11-6 control 6 3 16.89 16.67 16.84 16.93  
 pepper 11-7 control 7 1 21.79 20.99 22.01 20.61  
 pepper 11-7 control 7 2 20.31 21.12 20.36 21.12  
 pepper 11-7 control 7 3 23.53 24.16 23.53 24.12  
 pepper 11-8 control 8 1 16.29 18.15 16.34 18.03

pepper 11-8 control 8 2 17.69 17.39 17.73 17.52  
 pepper 11-8 control 8 3 18.45 17.65 18.49 17.77  
 pepper 11-9 control 9 1 19.13 19.68 19.47 19.55  
 pepper 11-9 control 9 2 18.92 21.12 18.87 21.24  
 pepper 11-9 control 9 3 17.69 18.03 17.73 18.03  
 pepper 11-10 control 10 1 17.10 16.80 16.80 16.97  
 pepper 11-10 control 10 2 20.95 20.91 20.74 20.82  
 pepper 11-10 control 10 3 16.25 17.18 16.34 17.01  
 pepper 11-11 control 11 1 15.79 16.55 15.66 16.67  
 pepper 11-11 control 11 2 20.74 18.87 20.48 19.13  
 pepper 11-11 control 11 3 17.73 20.06 17.82 20.19  
 pepper 11-12 control 12 1 17.18 21.29 17.39 21.24  
 pepper 11-12 control 12 2 20.02 20.06 19.89 20.27  
 pepper 11-12 control 12 3 17.22 19.30 16.93 19.51  
 pepper 11-13 control 13 1 17.69 18.62 17.77 18.54  
 pepper 11-13 control 13 2 13.88 14.64 13.75 14.60  
 pepper 11-13 control 13 3 19.30 19.09 19.42 19.00  
 pepper 11-14 control 14 1 15.02 15.79 15.45 15.62  
 pepper 11-14 control 14 2 20.19 20.61 20.19 20.69  
 pepper 11-14 control 14 3 20.48 18.45 20.44 18.54  
 pepper 12-1 copper 1 1 21.37 18.92 21.54 18.96  
 pepper 12-1 copper 1 2 17.65 17.56 17.90 17.65  
 pepper 12-1 copper 1 3 18.32 19.64 18.41 19.42  
 pepper 12-2 copper 2 1 21.63 22.51 21.71 22.51  
 pepper 12-2 copper 2 2 18.79 17.65 18.79 17.69  
 pepper 12-2 copper 2 3 19.30 17.69 19.38 17.69  
 pepper 12-3 copper 3 1 18.79 18.66 18.87 18.54  
 pepper 12-3 copper 3 2 17.44 19.13 17.27 19.13  
 pepper 12-3 copper 3 3 19.47 19.89 19.68 20.06  
 pepper 12-4 copper 4 1 17.35 16.34 17.39 16.38  
 pepper 12-4 copper 4 2 18.49 18.71 18.54 18.66  
 pepper 12-4 copper 4 3 16.80 13.88 16.80 13.88  
 pepper 12-5 copper 5 1 18.66 16.34 18.49 16.63  
 pepper 12-5 copper 5 2 20.02 18.24 20.10 18.20  
 pepper 12-5 copper 5 3 17.52 18.79 17.65 18.79  
 pepper 12-6 copper 6 1 20.14 19.51 19.97 19.64  
 pepper 12-6 copper 6 2 20.48 18.92 20.48 19.04  
 pepper 12-6 copper 6 3 18.62 18.28 18.87 17.90  
 pepper 12-7 copper 7 1 20.44 17.01 19.97 17.10  
 pepper 12-7 copper 7 2 16.34 16.50 16.46 16.38  
 pepper 12-7 copper 7 3 16.93 17.22 16.97 17.14  
 pepper 12-8 copper 8 1 21.67 19.55 21.79 19.47  
 pepper 12-8 copper 8 2 18.15 17.94 18.07 17.86  
 pepper 12-8 copper 8 3 15.19 15.83 15.19 15.95  
 pepper 12-9 copper 9 1 16.59 14.81 16.59 14.90  
 pepper 12-9 copper 9 2 17.86 18.92 17.94 18.87  
 pepper 12-9 copper 9 3 16.34 17.18 16.38 17.31  
 pepper 12-10 copper 10 1 13.71 13.46 13.84 13.46  
 pepper 12-10 copper 10 2 16.84 15.53 17.01 15.53  
 pepper 12-10 copper 10 3 13.50 15.40 13.42 15.53

pepper 12-11 copper 11 1 17.82 18.37 17.86 18.28  
 pepper 12-11 copper 11 2 19.13 19.38 19.26 19.38  
 pepper 12-11 copper 11 3 16.80 16.34 16.93 16.38  
 pepper 12-12 copper 12 1 16.67 16.80 16.63 16.72  
 pepper 12-12 copper 12 2 20.57 19.55 20.40 19.72  
 pepper 12-12 copper 12 3 21.92 24.25 22.18 24.08  
 pepper 12-13 copper 13 1 18.28 21.37 18.24 21.58  
 pepper 12-13 copper 13 2 22.43 23.36 22.56 23.53  
 pepper 12-13 copper 13 3 20.78 18.62 20.82 18.66  
 pepper 12-14 copper 14 1 14.81 14.56 14.81 14.81  
 pepper 12-14 copper 14 2 17.10 17.39 17.14 17.56  
 pepper 12-14 copper 14 3 15.57 15.62 15.49 15.74  
 pepper 12-15 copper 15 1 20.99 19.89 21.07 19.85  
 pepper 12-15 copper 15 2 18.62 20.06 18.58 20.19  
 pepper 12-15 copper 15 3 17.01 18.49 17.14 18.41  
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 pepper 13-1 twometals 1 2 15.32 15.62 15.32 15.57  
 pepper 13-1 twometals 1 3 13.67 13.42 13.58 13.54  
 pepper 13-2 twometals 2 1 16.46 15.45 16.50 15.32  
 pepper 13-2 twometals 2 2 16.29 16.00 16.29 16.04  
 pepper 13-2 twometals 2 3 16.72 16.25 16.84 16.38  
 pepper 13-3 twometals 3 1 16.00 16.76 16.21 16.67  
 pepper 13-3 twometals 3 2 17.82 16.38 17.99 16.25  
 pepper 13-3 twometals 3 3 15.02 14.81 14.98 14.90  
 pepper 13-4 twometals 4 1 11.00 11.09 11.05 11.13  
 pepper 13-4 twometals 4 2 14.56 13.63 14.68 13.71  
 pepper 13-4 twometals 4 3 13.71 14.60 13.75 14.52  
 pepper 13-5 twometals 5 1 13.97 14.09 13.97 14.22  
 pepper 13-5 twometals 5 2 18.32 17.44 18.49 17.39  
 pepper 13-5 twometals 5 3 17.48 16.76 17.39 16.93  
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 pepper 13-6 twometals 6 2 17.77 17.94 17.86 18.03  
 pepper 13-6 twometals 6 3 13.71 13.08 13.58 13.29  
 pepper 13-7 twometals 7 1 12.70 12.27 12.78 12.31  
 pepper 13-7 twometals 7 2 15.53 16.17 15.49 16.17  
 pepper 13-7 twometals 7 3 15.28 15.40 15.62 15.23  
 pepper 13-8 twometals 8 1 8.93 10.58 8.93 10.54  
 pepper 13-8 twometals 8 2 15.07 14.13 14.94 13.97  
 pepper 13-8 twometals 8 3 14.43 14.81 14.43 14.94  
 pepper 13-9 twometals 9 1 16.93 18.24 17.01 17.99  
 pepper 13-9 twometals 9 2 17.48 16.84 17.31 16.80  
 pepper 13-9 twometals 9 3 15.79 16.63 15.66 16.80  
 pepper 13-10 twometals 10 1 14.98 14.68 15.36 14.52  
 pepper 13-10 twometals 10 2 17.60 16.89 17.44 17.05  
 pepper 13-10 twometals 10 3 12.27 11.85 12.10 12.06  
 pepper 13-11 twometals 11 1 13.33 12.65 13.58 12.61  
 pepper 13-11 twometals 11 2 16.84 15.49 16.63 15.40  
 pepper 13-11 twometals 11 3 13.97 13.42 13.80 13.67  
 pepper 13-12 twometals 12 1 16.72 16.72 16.72 16.67  
 pepper 13-12 twometals 12 2 14.43 15.49 14.47 15.53



pepper 13-12 twometals 12 3 8.89 9.23 8.80 9.23  
 pepper 13-13 twometals 13 1 17.86 17.22 17.99 17.14  
 pepper 13-13 twometals 13 2 15.95 15.36 16.08 15.32  
 pepper 13-13 twometals 13 3 18.15 15.19 18.20 15.11  
 pepper 13-14 twometals 14 1 15.15 14.30 15.36 14.18  
 pepper 13-14 twometals 14 2 14.56 16.46 14.60 16.59  
 pepper 13-14 twometals 14 3 13.37 12.99 13.20 12.87  
 pepper 13-15 twometals 15 1 13.03 13.63 13.29 13.50  
 pepper 13-15 twometals 15 2 13.71 17.35 13.80 17.18  
 pepper 13-15 twometals 15 3 14.22 13.25 14.13 13.16  
 pepper 14-1 nickel 1 1 16.97 16.04 17.14 15.95  
 pepper 14-1 nickel 1 2 15.19 17.18 15.23 17.60  
 pepper 14-1 nickel 1 3 16.04 15.11 16.04 15.28  
 pepper 14-2 nickel 2 1 19.13 21.75 19.13 21.71  
 pepper 14-2 nickel 2 2 21.50 21.12 21.58 21.12  
 pepper 14-2 nickel 2 3 11.98 12.91 12.15 12.78  
 pepper 14-3 nickel 3 1 19.93 22.26 20.06 22.30  
 pepper 14-3 nickel 3 2 23.23 21.79 23.57 21.67  
 pepper 14-3 nickel 3 3 17.86 16.50 18.03 16.46  
 pepper 14-4 nickel 4 1 16.21 16.63 16.12 16.76  
 pepper 14-4 nickel 4 2 16.55 16.59 16.59 16.80  
 pepper 14-4 nickel 4 3 13.50 13.58 13.67 13.58  
 pepper 14-5 nickel 5 1 19.30 20.82 19.51 20.82  
 pepper 14-5 nickel 5 2 19.68 19.30 19.64 19.21  
 pepper 14-5 nickel 5 3 11.43 9.94 11.43 9.82  
 pepper 14-6 nickel 6 1 14.39 20.36 14.52 20.52  
 pepper 14-6 nickel 6 2 21.29 21.75 21.41 21.71  
 pepper 14-6 nickel 6 3 19.09 20.52 19.38 20.40  
 pepper 14-7 nickel 7 1 21.50 22.26 21.84 21.84  
 pepper 14-7 nickel 7 2 20.61 21.33 20.86 21.24  
 pepper 14-7 nickel 7 3 15.79 15.07 15.74 15.32  
 pepper 14-8 nickel 8 1 17.73 16.50 17.82 16.42  
 pepper 14-8 nickel 8 2 19.30 19.93 19.55 19.72  
 pepper 14-8 nickel 8 3 14.94 16.38 14.90 16.38  
 pepper 14-9 nickel 9 1 19.55 20.44 19.76 20.40  
 pepper 14-9 nickel 9 2 18.15 17.44 18.24 17.48  
 pepper 14-9 nickel 9 3 17.01 16.21 17.27 16.04  
 pepper 14-10 nickel 10 1 14.81 17.05 14.94 16.97  
 pepper 14-10 nickel 10 2 16.93 16.59 16.97 16.72  
 pepper 14-10 nickel 10 3 15.62 15.40 15.62 15.19  
 pepper 14-11 nickel 11 1 18.71 18.11 19.04 17.86  
 pepper 14-11 nickel 11 2 16.89 19.04 16.84 18.92  
 pepper 14-11 nickel 11 3 17.18 18.62 17.14 18.66  
 pepper 14-12 nickel 12 1 16.29 16.84 16.50 16.63  
 pepper 14-12 nickel 12 2 14.98 14.94 15.28 14.94  
 pepper 14-12 nickel 12 3 15.49 15.28 15.57 15.36  
 pepper 14-13 nickel 13 1 20.78 18.28 20.78 18.15  
 pepper 14-13 nickel 13 2 18.66 20.36 18.79 20.40  
 pepper 14-13 nickel 13 3 12.10 12.78 11.85 12.78  
 pepper 14-14 nickel 14 1 17.35 16.72 17.82 16.50

pepper 14-14 nickel 14 2 16.97 16.59 17.18 16.55  
 pepper 14-14 nickel 14 3 14.77 13.97 14.64 14.13  
 pepper 14-15 nickel 15 1 17.31 18.79 17.10 18.83  
 pepper 14-15 nickel 15 2 21.29 20.95 21.50 21.03  
 pepper 14-15 nickel 15 3 12.44 11.55 12.57 11.38  
 bean 11-1 control 1 1 131.70 108.34 131.57 107.83  
 bean 11-1 control 1 2 138.47 136.44 138.38 135.38  
 bean 11-1 control 1 3 123.32 88.53 123.15 88.62  
 bean 11-2 control 2 1 127.17 134.49 127.76 134.74  
 bean 11-2 control 2 2 126.32 132.16 126.36 132.42  
 bean 11-2 control 2 3 101.02 107.66 101.40 107.53  
 bean 11-3 control 3 1 121.50 118.92 122.13 119.51  
 bean 11-3 control 3 2 118.20 111.72 117.99 111.98  
 bean 11-3 control 3 3 126.41 121.67 126.28 121.58  
 bean 11-4-2 control 4 2 100.89 79.43 101.44 79.86  
 bean 11-4-3 control 4 3 100.59 98.82 100.34 99.15  
 bean 11-5-1 control 5 1 93.95 99.24 94.29 98.94  
 bean 11-5-2 control 5 2 142.15 114.73 142.53 114.81  
 bean 11-5-3 control 5 3 111.68 106.26 113.16 106.98  
 bean 11-6-1 control 6 1 91.58 100.85 91.79 101.02  
 bean 11-6-2 control 6 2 92.55 86.25 92.68 86.03  
 bean 11-6-3 control 6 3 92.09 71.22 92.55 71.39  
 bean 11-7-1 control 7 1 118.37 91.41 118.49 91.75  
 bean 11-7-2 control 7 2 100.38 99.37 99.49 100.47  
 bean 11-7-3 control 7 3 76.34 83.71 76.17 84.77  
 bean 11-8-1 control 8 1 99.83 98.94 100.00 98.26  
 bean 11-8-2 control 8 2 123.32 130.00 124.08 130.26  
 bean 11-8-3 control 8 3 87.39 97.71 87.73 97.97  
 bean 11-9-1 control 9 1 91.45 59.92 90.44 60.56  
 bean 11-9-2 control 9 2 107.96 89.67 107.79 89.76  
 bean 11-9-3 control 9 3 109.69 112.95 110.07 112.53  
 bean 11-10-1 control 10 1 126.53 113.75 126.75 113.50  
 bean 11-10-2 control 10 2 106.60 124.08 107.53 123.57  
 bean 11-10-3 control 10 3 92.51 85.99 92.55 85.74  
 bean 11-11-1 control 11 1 111.30 108.80 111.09 108.59  
 bean 11-11-2 control 11 2 122.01 118.96 122.26 118.32  
 bean 11-11-3 control 11 3 94.92 82.95 95.43 82.61  
 bean 11-12-1 control 12 1 109.69 117.22 109.39 117.01  
 bean 11-12-2 control 12 2 106.86 107.02 106.47 106.81  
 bean 11-12-3 control 12 3 112.31 95.73 112.91 95.73  
 bean 11-13-1 control 13 1 139.53 142.57 139.82 142.91  
 bean 11-13-2 control 13 2 52.31 71.18 52.01 70.88  
 bean 11-14-1 control 14 1 66.40 59.12 65.93 58.74  
 bean 11-14-2 control 14 2 91.54 101.06 91.87 100.97  
 bean 11-14-3 control 14 3 102.20 66.02 103.17 66.74  
 bean 11-15-1 control 15 1 103.64 81.63 102.84 82.06  
 bean 11-15-2 control 15 2 117.10 121.07 116.38 121.58  
 bean 11-15-3 control 15 3 134.24 122.05 134.49 121.63  
 bean 12-1-1 copper 1 1 121.67 101.27 122.09 101.82  
 bean 12-1-2 copper 1 2 102.92 111.38 103.26 111.85

bean 12-1-3 copper 1 3 92.09 79.73 91.87 77.74  
 bean 12-2-1 copper 2 1 127.63 125.94 127.51 126.07  
 bean 12-2-2 copper 2 2 113.08 110.07 113.92 109.65  
 bean 12-2-3 copper 2 3 108.08 123.70 107.49 124.29  
 bean 12-3-1 copper 3 1 74.74 91.87 75.03 91.83  
 bean 12-3-2 copper 3 2 105.04 111.51 105.67 111.17  
 bean 12-3-3 copper 3 3 68.30 102.67 68.26 102.58  
 bean 12-4-1 copper 4 1 112.31 116.55 113.08 116.21  
 bean 12-4-2 copper 4 2 101.69 104.99 102.20 104.78  
 bean 12-4-3 copper 4 3 116.04 109.61 115.45 109.99  
 bean 12-5-1 copper 5 1 133.22 128.18 133.81 128.02  
 bean 12-5-2 copper 5 2 119.81 123.74 120.74 123.70  
 bean 12-5-3 copper 5 3 102.62 128.18 102.84 128.48  
 bean 12-6-1 copper 6 1 99.45 106.64 100.21 106.81  
 bean 12-6-2 copper 6 2 114.68 107.91 114.52 107.58  
 bean 12-6-3 copper 6 3 102.58 112.31 102.54 112.53  
 bean 12-7-1 copper 7 1 109.61 113.42 109.31 113.42  
 bean 12-7-2 copper 7 2 119.76 117.39 120.57 117.52  
 bean 12-7-3 copper 7 3 107.66 99.62 108.13 99.20  
 bean 12-8-1 copper 8 1 102.37 106.01 102.37 105.50  
 bean 12-8-2 copper 8 2 107.96 102.92 108.25 102.71  
 bean 12-8-3 copper 8 3 111.17 130.64 111.68 130.05  
 bean 12-9-1 copper 9 1 131.49 83.88 130.68 83.28  
 bean 12-9-2 copper 9 2 106.01 103.05 106.43 102.71  
 bean 12-9-3 copper 9 3 83.62 121.46 76.47 121.75  
 bean 12-10-1 copper 10 1 108.55 124.08 109.27 123.57  
 bean 12-10-2 copper 10 2 110.92 111.55 110.50 111.93  
 bean 12-10-3 copper 10 3 94.88 100.93 95.09 100.72  
 bean 12-11-1 copper 11 1 103.09 99.07 103.64 98.35  
 bean 12-12-1 copper 11 1 94.54 92.64 94.41 92.59  
 bean 12-11-2 copper 11 2 130.72 131.36 131.02 131.61  
 bean 12-13-1 copper 12 1 124.42 119.51 124.63 119.76  
 bean 12-12-2 copper 12 2 111.60 120.02 112.23 119.85  
 bean 12-12-3 copper 12 3 102.88 114.60 103.43 114.47  
 bean 12-13-2 copper 13 2 99.92 108.34 99.83 108.04  
 bean 12-13-3 copper 13 3 113.42 100.42 113.63 101.02  
 bean 12-14-1 copper 14 1 111.09 98.35 111.68 98.69  
 bean 12-14-2 copper 14 2 127.93 127.08 128.31 126.79  
 bean 12-14-3 copper 14 3 118.71 117.77 118.71 117.56  
 bean 14-1-1 nickel 1 1 75.96 86.33 76.34 86.03  
 bean 14-1-2 nickel 1 2 112.27 114.13 111.98 113.71  
 bean 14-1-3 nickel 1 3 114.60 138.85 115.36 138.89  
 bean 14-2-1 nickel 2 1 80.36 74.65 80.62 74.78  
 bean 14-2-2 nickel 2 2 90.73 105.80 91.37 105.25  
 bean 14-2-3 nickel 2 3 92.00 81.97 92.76 81.89  
 bean 14-3-1 nickel 3 1 109.56 116.67 109.65 116.76  
 bean 14-3-2 nickel 3 2 87.09 87.09 86.88 86.92  
 bean 14-3-3 nickel 3 3 101.57 113.88 102.12 113.58  
 bean 14-4-1 nickel 4 1 103.17 87.43 103.77 86.84  
 bean 14-4-2 nickel 4 2 88.45 101.44 88.62 101.06

bean 14-4-3 nickel 4 3 103.85 98.60 103.94 97.84  
 bean 14-5-1 nickel 5 1 89.08 88.45 89.42 87.13  
 bean 14-5-2 nickel 5 2 108.29 111.00 108.76 110.66  
 bean 14-5-3 nickel 5 3 119.38 105.46 119.97 105.25  
 bean 14-6-1 nickel 6 1 83.41 117.22 82.82 117.18  
 bean 14-6-2 nickel 6 2 94.50 133.73 95.09 133.39  
 bean 14-6-3 nickel 6 3 118.37 113.75 118.54 113.12  
 bean 14-7-1 nickel 7 1 93.99 91.41 93.91 91.45  
 bean 14-7-2 nickel 7 2 110.75 88.57 110.88 88.53  
 bean 14-7-3 nickel 7 3 99.07 110.62 98.18 110.54  
 bean 14-8-1 nickel 8 1 119.17 66.91 119.38 67.16  
 bean 14-8-2 nickel 8 2 103.55 91.20 103.64 90.56  
 bean 14-8-3 nickel 8 3 96.40 104.61 96.32 103.98  
 bean 14-9-1 nickel 9 1 52.05 61.40 53.53 62.21  
 bean 14-9-2 nickel 9 2 124.71 125.14 124.59 125.22  
 bean 14-9-3 nickel 9 3 118.11 105.84 117.94 106.64  
 bean 14-10-1 nickel 10 1 90.27 87.22 90.27 87.13  
 bean 14-10-2 nickel 10 2 89.76 95.39 90.22 95.68  
 bean 14-10-3 nickel 10 3 103.72 113.03 104.19 112.82  
 bean 14-11-1 nickel 11 1 71.27 78.54 71.48 78.37  
 bean 14-11-2 nickel 11 2 117.14 121.03 117.44 121.54  
 bean 14-11-3 nickel 11 3 84.85 113.08 84.98 113.12  
 bean 14-12-1 nickel 12 1 132.71 132.16 133.81 132.29  
 bean 14-12-2 nickel 12 2 107.58 92.42 107.15 92.55  
 bean 14-12-3 nickel 12 3 101.57 95.26 101.95 95.01  
 bean 14-13-1 nickel 13 1 90.35 84.77 90.94 84.43  
 bean 14-13-2 nickel 13 2 98.14 62.29 98.18 62.08  
 bean 14-13-3 nickel 13 3 100.38 96.32 100.80 96.53  
 bean 14-14-1 nickel 14 1 84.00 87.13 83.96 86.88  
 bean 14-14-2 nickel 14 2 97.46 105.42 96.78 106.22  
 bean 14-14-3 nickel 14 3 94.96 97.08 95.09 96.57  
 bean 13-1-1 twometals 1 1 113.42 117.44 113.92 117.39  
 bean 13-1-2 twometals 1 2 103.05 87.47 103.17 87.64  
 bean 13-1-3 twometals 1 3 74.90 82.86 75.24 83.03  
 bean 13-2-1 twometals 2 1 103.09 87.94 103.17 87.90  
 bean 13-2-2 twometals 2 2 89.63 98.65 89.93 99.03  
 bean 13-2-3 twometals 2 3 101.52 98.98 101.78 98.90  
 bean 13-3-1 twometals 3 1 95.39 87.85 95.22 86.97  
 bean 13-3-2 twometals 3 2 103.22 97.59 103.77 97.46  
 bean 13-3-3 twometals 3 3 87.73 87.52 88.79 87.64  
 bean 13-4-1 twometals 4 1 91.07 102.71 91.45 102.12  
 bean 13-4-2 twometals 4 2 98.26 105.50 98.69 104.95  
 bean 13-4-3 twometals 4 3 85.65 87.26 86.16 87.35  
 bean 13-5-1 twometals 5 1 120.36 106.05 120.82 106.26  
 bean 13-5-2 twometals 5 2 121.46 116.29 122.18 116.00  
 bean 13-5-3 twometals 5 3 69.19 86.84 68.73 87.43  
 bean 13-6-1 twometals 6 1 66.36 67.54 66.19 67.25  
 bean 13-6-2 twometals 6 2 103.39 87.09 103.47 86.97  
 bean 13-6-3 twometals 6 3 97.55 82.18 96.70 82.31  
 bean 13-7-1 twometals 7 1 73.89 82.90 73.38 82.99

bean 13-7-2 twometals 7 2 81.89 78.12 81.89 77.87  
bean 13-7-3 twometals 7 3 120.10 108.84 120.52 106.56  
bean 13-8-1 twometals 8 1 99.24 68.47 99.58 68.22  
bean 13-8-2 twometals 8 2 102.45 93.78 102.67 93.91  
bean 13-8-3 twometals 8 3 70.72 62.46 70.67 62.76  
bean 13-9-1 twometals 9 1 99.92 104.95 100.55 104.78  
bean 13-9-2 twometals 9 2 96.66 102.71 96.70 102.41  
bean 13-9-3 twometals 9 3 70.08 81.76 69.95 82.06  
bean 13-10-1 twometals 10 1 92.93 95.47 93.27 95.73  
bean 13-10-2 twometals 10 2 97.71 100.55 98.22 100.85  
bean 13-10-3 twometals 10 3 112.78 69.83 112.65 69.32  
bean 13-11-1 twometals 11 1 101.90 86.75 102.16 86.29  
bean 13-11-2 twometals 11 2 108.13 102.29 108.38 102.12  
bean 13-11-3 twometals 11 3 123.28 115.70 123.87 116.12  
bean 13-12-1 twometals 12 1 80.79 97.33 80.70 97.12  
bean 13-12-2 twometals 12 2 88.87 99.58 88.70 100.00  
bean 13-12-3 twometals 12 3 120.10 121.88 120.78 121.67  
bean 13-13-1 twometals 13 1 82.40 103.17 82.61 102.45  
bean 13-13-2 twometals 13 2 91.62 105.84 91.24 105.54  
bean 13-13-3 twometals 13 3 109.01 104.78 109.18 103.72