

## Management of foliar application of fungicides to enhance physiological and sanitary quality of soybean seeds

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**Supplementary Table 1.** Summary of combined analysis of variance ( $prob > F_c$ ), water content, germination in sand, germination, seedling emergence, emergence speed index, mechanical damage by the sodium hypochlorite test, electrical conductivity, accelerated aging, and seed vigor and viability by the tetrazolium test in relation to the sources of variation in the 2014/2015 crop year in the municipalities of Lavras and Ijaci, MG, Brazil.

| Source of variation | DF | Water content | Germination in sand | Germination | Seedling emergence | Emergence speed index | Mechanical damage | Electrical conductivity | Accelerated aging | Vigor | Viability |
|---------------------|----|---------------|---------------------|-------------|--------------------|-----------------------|-------------------|-------------------------|-------------------|-------|-----------|
| Environments (E)    | 1  | NS            | **                  | NS          | **                 | NS                    | **                | **                      | *                 | NS    | **        |
| No. of applications | 5  | NS            | **                  | *           | **                 | **                    | NS                | NS                      | **                | *     | **        |
| (NA)                |    |               |                     |             |                    |                       |                   |                         |                   |       |           |
| NA x E              | 5  | NS            | NS                  | NS          | NS                 | NS                    | NS                | NS                      | NS                | NS    | NS        |
| Error (a)           | 24 | -             | -                   | -           | -                  | -                     | -                 | -                       | -                 | -     | -         |
| Fungicides (F)      | 4  | NS            | *                   | *           | **                 | **                    | **                | **                      | **                | **    | **        |
| NA x F              | 20 | NS            | NS                  | NS          | NS                 | NS                    | NS                | NS                      | NS                | NS    | NS        |
| F x E               | 4  | NS            | NS                  | NS          | NS                 | NS                    | NS                | NS                      | NS                | NS    | NS        |
| NA x F x E          | 20 | NS            | NS                  | NS          | NS                 | NS                    | NS                | NS                      | NS                | NS    | NS        |
| Error (b)           | 96 | -             | -                   | -           | -                  | -                     | -                 | -                       | -                 | -     | -         |
| CV (a) - %          |    | 10.2          | 2.5                 | 13.16       | 3.9                | 4.5                   | 16.5              | 16.9                    | 12.8              | 14.6  | 5.2       |
| CV (b) - %          |    | 11.5          | 3.2                 | 9.73        | 3.9                | 5.0                   | 19.2              | 15.2                    | 17.3              | 5.4   | 2.8       |
| Overall mean        |    | 11.0          | 94.1                | 86.2        | 95.8               | 151.8                 | 5.0               | 45.9                    | 65.2              | 79.2  | 87.0      |
| After storage       |    |               |                     |             |                    |                       |                   |                         |                   |       |           |
| Environments (E)    | 1  | -             | **                  | NS          | NS                 | **                    | **                | **                      | **                | **    | **        |
| No. of applications | 5  | NS            | **                  | **          | NS                 | NS                    | *                 | **                      | **                | **    | **        |
| (NA)                |    |               |                     |             |                    |                       |                   |                         |                   |       |           |
| NA x E              | 5  | NS            | NS                  | NS          | NS                 | NS                    | NS                | NS                      | NS                | NS    | NS        |
| Error (a)           | 24 | -             | -                   | -           | -                  | -                     | -                 | -                       | -                 | -     | -         |
| Fungicides (F)      | 4  | NS            | **                  | **          | **                 | *                     | NS                | **                      | NS                | NS    | NS        |
| NA x F              | 20 | NS            | NS                  | NS          | NS                 | NS                    | NS                | NS                      | NS                | NS    | NS        |
| F x E               | 4  | NS            | NS                  | NS          | NS                 | NS                    | NS                | NS                      | NS                | NS    | NS        |
| NA x F x E          | 20 | NS            | NS                  | NS          | NS                 | NS                    | NS                | NS                      | NS                | NS    | NS        |
| Error (b)           | 96 | -             | -                   | -           | -                  | -                     | -                 | -                       | -                 | -     | -         |
| CV (a) - %          |    | 9.1           | 5.4                 | 9.4         | 10.0               | 11.5                  | 16.0              | 16.0                    | 17.9              | 6.0   | 4.5       |
| CV (b) - %          |    | 6.6           | 5.5                 | 10.8        | 7.0                | 8.6                   | 17.1              | 16.7                    | 19.3              | 7.1   | 4.8       |
| Overall mean        |    | 10.5          | 85.3                | 80.2        | 85.4               | 62.2                  | 8.4               | 43.9                    | 59.8              | 70.3  | 80.2      |

\*\* Significant at 1%, \* Significant at 5%, and (NS) Not significant according to the F test; DF – degrees of freedom; CV – coefficient of variation.