

**S2 Table. Summary of mutations detected in *TaPIN1* sequences of *T. annulata* isolates from Tunisia, Sudan and Turkey.**

| Amino acid position   |                              | 1 | 2 | 22 | 23 | 24 | 26 | 53 | 61 | 78 | 96 | 143  |
|-----------------------|------------------------------|---|---|----|----|----|----|----|----|----|----|------|
| <i>TaPIN1</i> TA18945 |                              | M | I | T  | I  | I  | A  | A  | A  | L  | R  | STOP |
| Tunisian isolate      | Bup. resistant <i>TaPIN1</i> | - | - | I  | -  | -  | L  | P  | -  | -  | -  | -    |
|                       | 16 isolate                   | L | - | -  | -  | -  | -  | -  | -  | -  | -  | -    |
|                       | Th212                        | - | - | A  | -  | -  | -  | -  | -  | -  | -  | -    |
| Sudanese isolates     | Th10,                        | - | - | -  | N  | -  | L  | -  | -  | -  | -  | -    |
|                       | E21                          | - | - | -  | N  | -  | P  | -  | -  | -  | -  | -    |
|                       | E1, Th210                    | - | - | -  | -  | V  | -  | -  | -  | -  | -  | -    |
|                       | 21 isolate                   | - | - | -  | -  | -  | P  | -  | -  | -  | -  | -    |
|                       | B241                         | - | - | -  | -  | V  | -  | P  | -  | -  | -  | -    |
|                       | E23                          | - | - | -  | -  | -  | -  | -  | G  | -  | -  | Y    |
|                       | Th18                         | - | - | -  | -  | -  | -  | -  | -  | -  | -  | Y    |
|                       |                              |   |   |    |    |    |    |    |    |    |    |      |
| Turkish isolates      | A21/AT4/cl-3, 8              | - | F | I  | -  | -  | T  | -  | -  | -  | -  | -    |
|                       | A10/AT3/cl-8, 9              | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -    |
|                       | A9/BT/cl-5                   | - | - | A  | N  | -  | P  | -  | -  | -  | -  | -    |
|                       | G3/BT/cl-2                   | - | - | -  | -  | -  | -  | -  | -  | -  | K  | -    |
|                       | N3/BT/cl-4                   | - | - | -  | -  | -  | -  | -  | -  | P  | -  | -    |