

Genomic Differences between Two *Fusarium oxysporum* Formae Speciales Causing Root Rots in Cucumber

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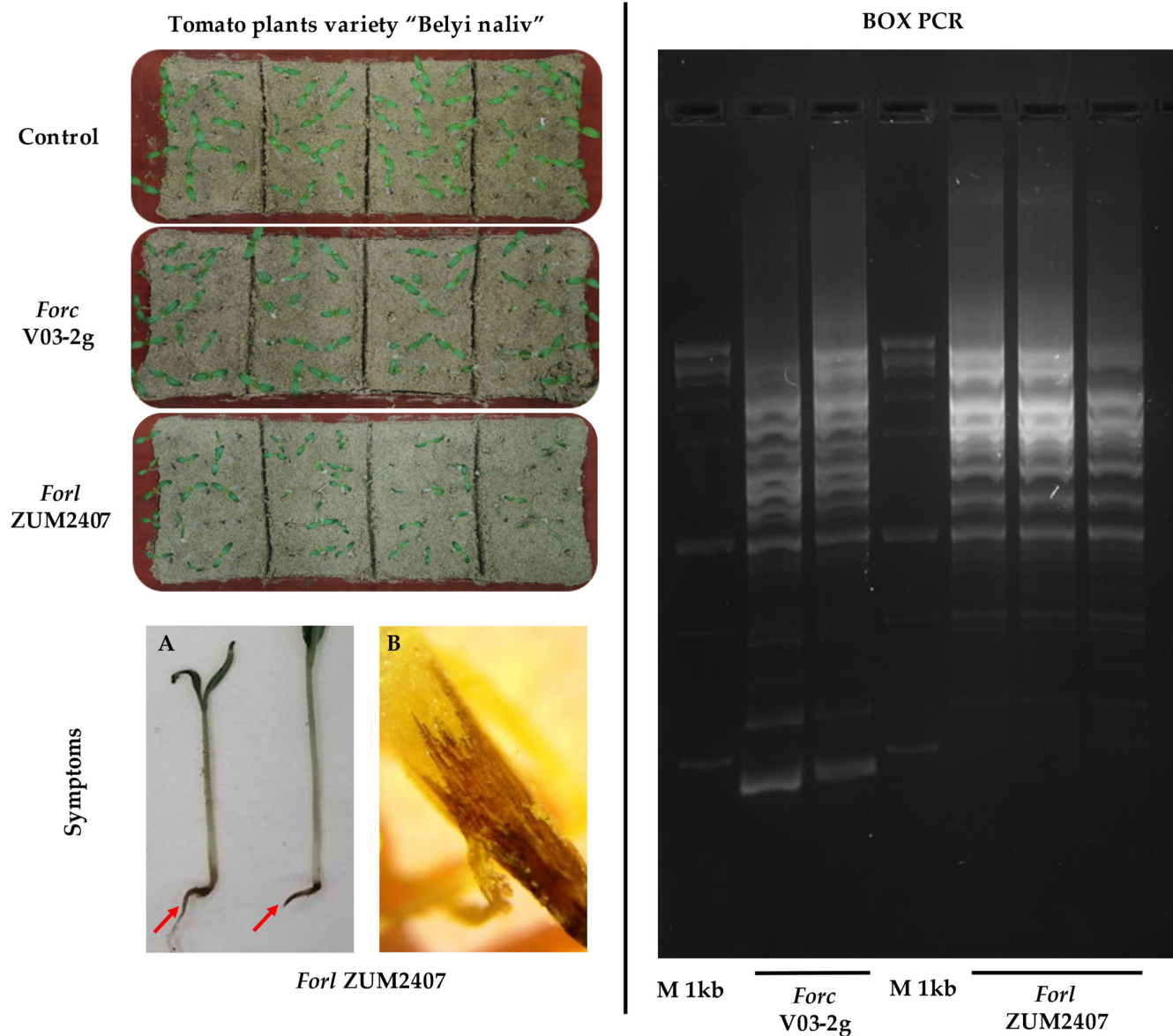


Figure S1. Tomato disease assay and symptoms caused by *Forl* ZUM2407 on tomato roots. *Forc* V03-2g and *Forl* ZUM2407 BOX PCR analysis. (red arrows point at root rots/ "M" – means marker: 1 kb ladder)

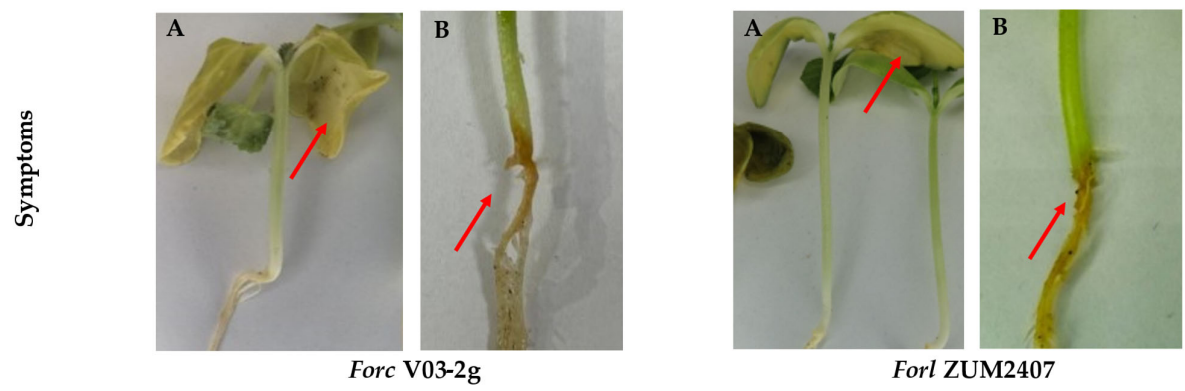
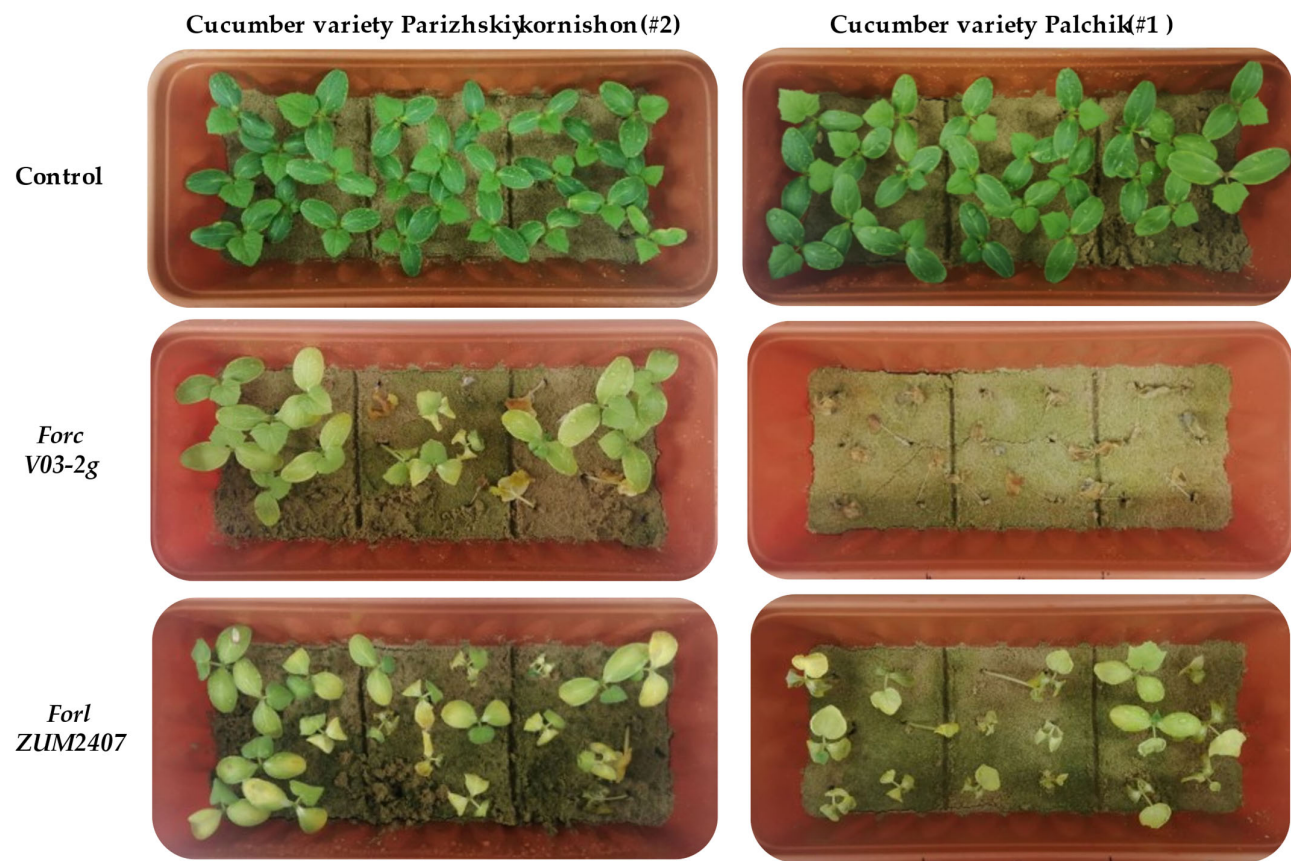


Figure S2. Disease assay on two cucumber varieties and symptoms caused by *Forc* V03-2g and *Forl* ZUM2407 strains [red arrows point at damping off (A) and root rots (B)]

Forl ZUM2407 on cucumber variety Palchik (#1)



Symptoms



Forl ZUM2407 from diseased roots



Forc V03-2g on cucumber variety Parizhskiy kornichon (#2)



Symptoms



Forc V03-2g from diseased roots



Figure S3. Disease development on cucumber plants between strains *Forc* V03-2g on variety Parizhskiy kornichon (#2) and *Forl* ZUM2407 on variety Palchik (#1). Reisolation from cucumber affected areas. [red arrows point at root and foot rots (B)]

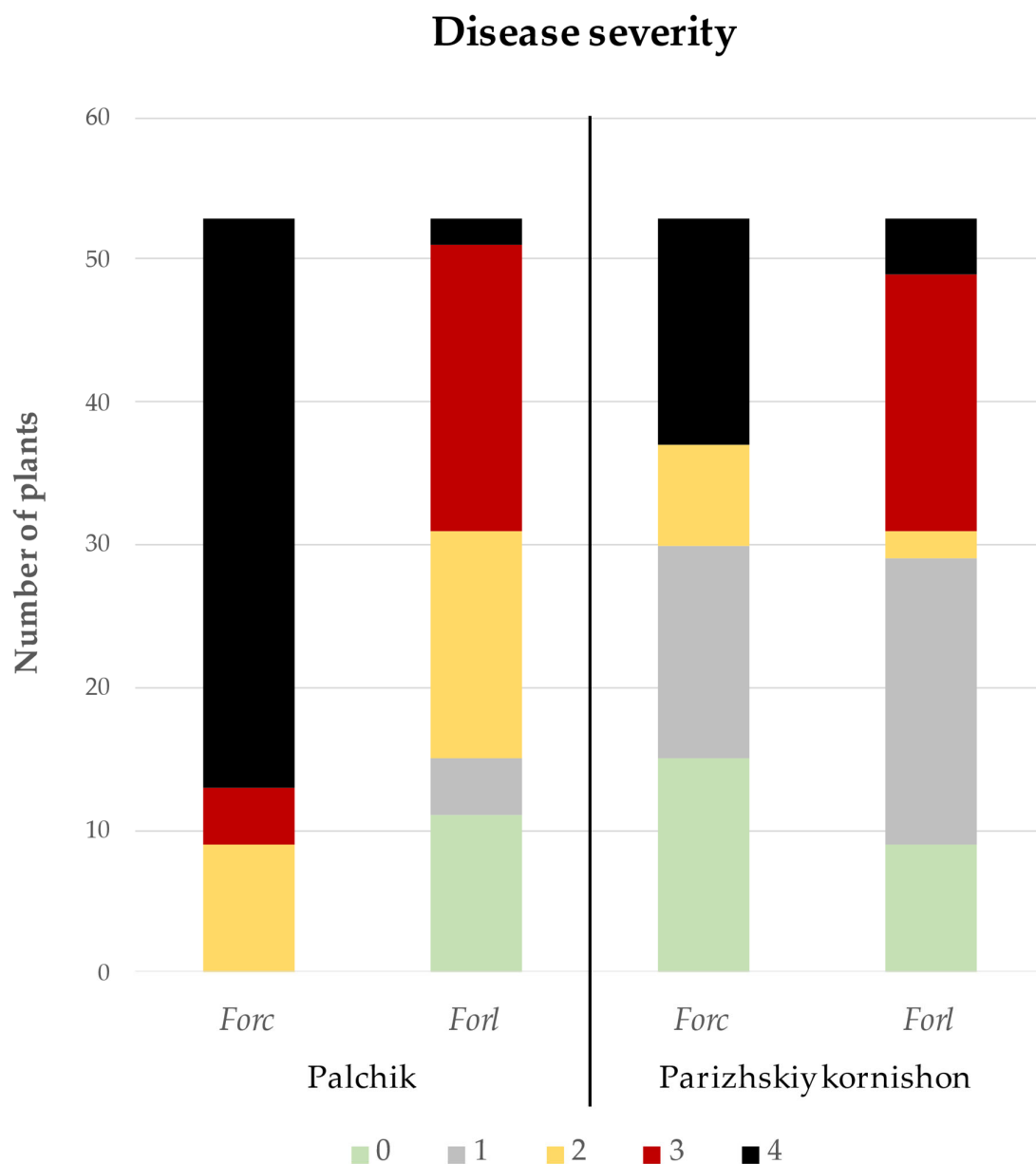


Figure S4. Disease severity on two cucumber varieties pretreated with *Forc* V03-2g and *Forl* ZUM2407 strains. Assessment was based on 0-4 scale: 0 – healthy plants; 1 - plants with small lesions (weak roots browning/weak cotyledons chlorosis); 2 - plants with developed lesions (clearly visible symptoms of root rot in the area of root neck and main root/ yellowed cotyledons); 3 - plants with large lesions (root rot ascends along hypocotyl to cotyledons/ wilted and browned cotyledons); 4 - dead plants (Figure S6.1-S6.4)

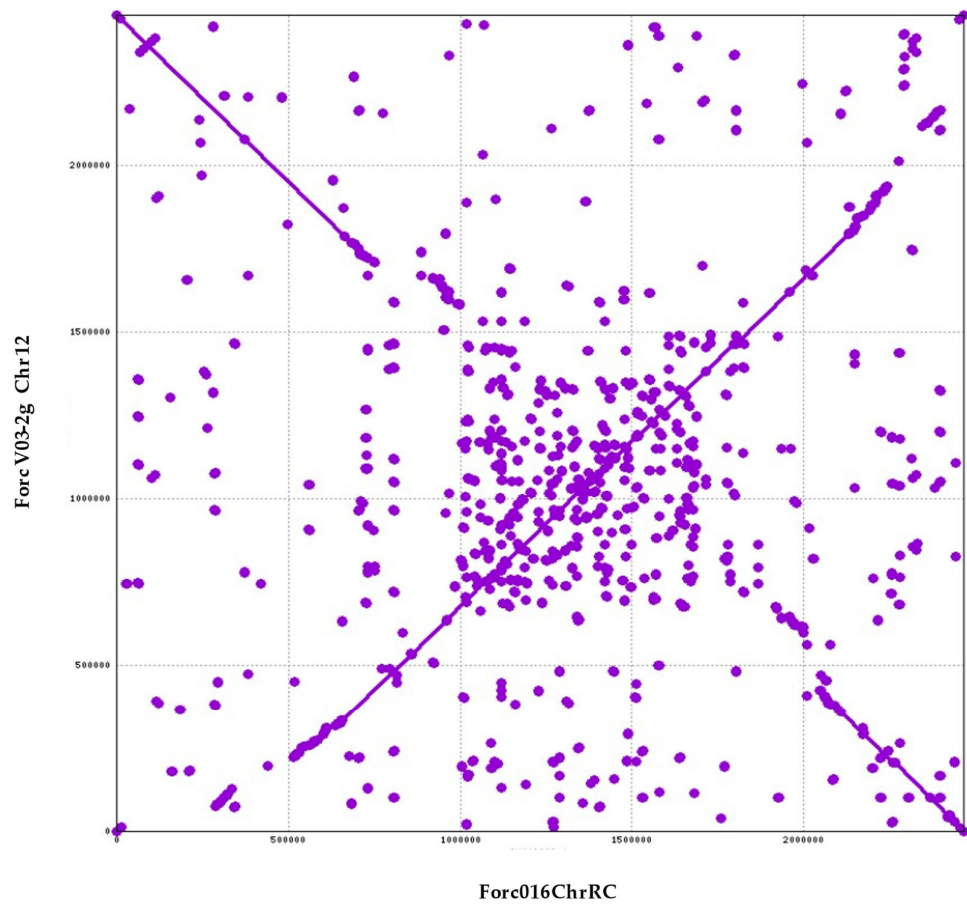


Figure S5. Similarity between *Forc V03-2g* chromosome 12 and the *Forc016* pathogenicity chromosome RC.

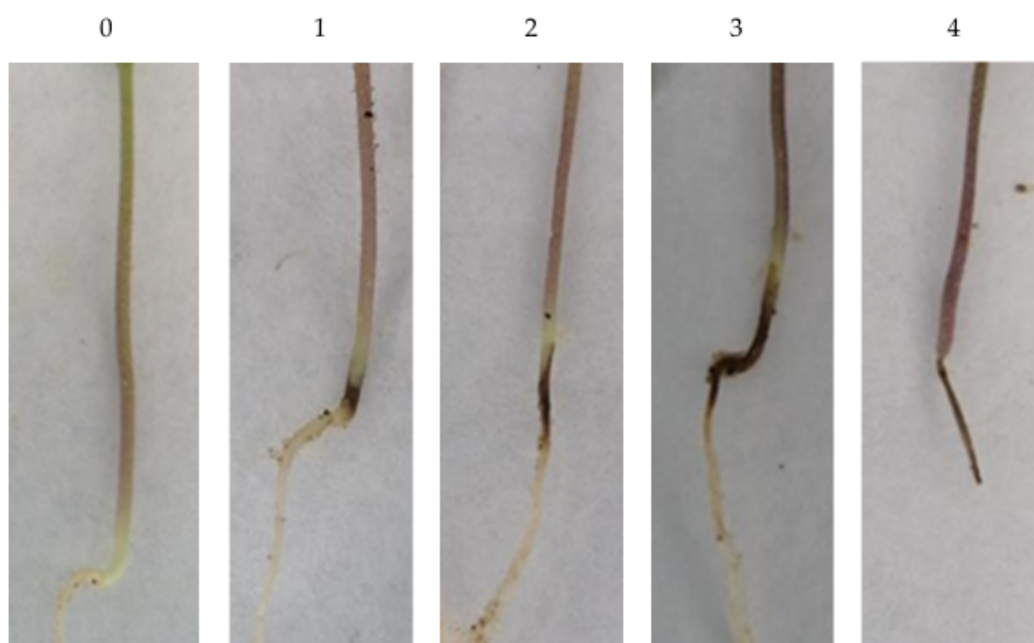


Figure S6a. Foot and root rot on tomato plants. Severity symptom scale (0-4).

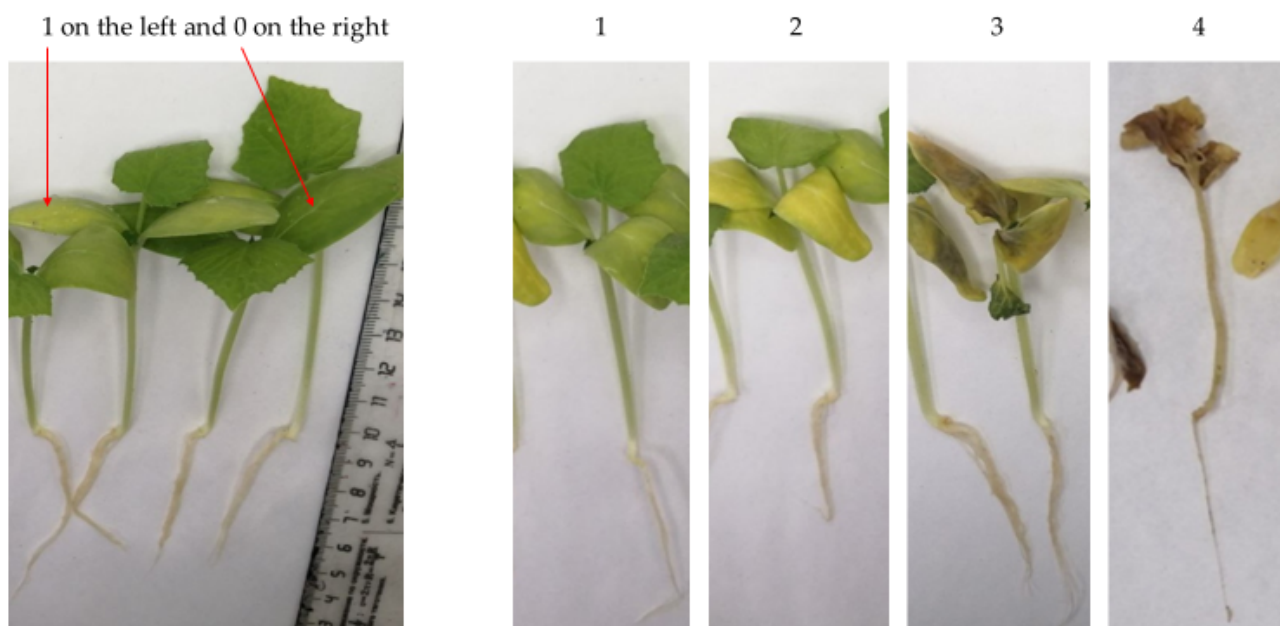
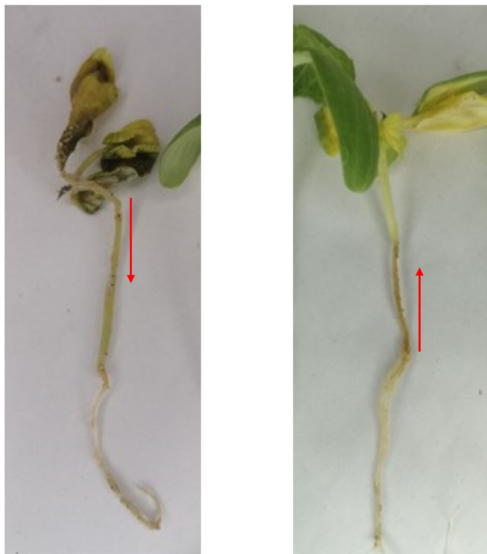


Figure S6b. Damping off on cucumber plants. Severity symptom scale (0-4).



Figure S6c. Foot and root rot on cucumber plants. Severity symptom scale (0-4).

Rot ascending from the root system up the hypocotyl and descending from the cotyledons



Damping off and Foot and root rot on cucumber plants



Figure S6d. Damping off and foot and root rot on cucumber plants. Severity symptom scale (0-4).