Supplementary Table S1. Fixed effect ANOVA of FBR severity and incidence of early maturing cultivars comprising the original, intermediate, and advanced selected populations evaluated for four seasons.

| | | NuMex Camino | | | NuMex Sweetpak | |
| | | Sev.[y] | Inc.[z] | | Sev.[y] | Inc.[z] |
Source[w]	df	P-value	P-value	df	P-value	P-value
Intermediate selections with their parents						
Year	3	0.01*	0.01**	3	0.03*	0.03*
Populations	2	0.57	0.56	2	0.69	0.54
Year x Popl.	5[x]	0.07	0.03*	6	0.01*	0.009**
Advanced selections with their parents						
Year	1	0.22	0.30	1	0.72	0.66
Populations	2	0.92	0.89	2	0.02*	0.03*
Year x Popl.	2	0.69	0.54	2	0.65	0.49

[w]Entries were evaluated in a randomized complete block design with four replications from 2016 to 2019 summer seasons.

[x]The parental population of 'NuMex Camino' did not produce any bulbs in 2017 evaluation.

[y]Severity of FBR. After 20 days of disease development period twenty arbitrarily selected, inoculated bulbs were rated individually for FBR severity on a scale of 1 to 9, where 1= no symptoms, 2<10% basal plate decay, 3=11%-20%, 4=21%-30%, 5=31%-40%, 6=41%-50%, 7=51%- 60%, 8=61%-70%, and 9>70% of the basal plate is infected.

[z]Incidence of FBR, which is the percentage of 20 inoculated bulbs showing FBR symptoms, was calculated after 20 d of incubation.

*, **Significantly different at $P < 0.05$ and 0.01, respectively.

Supplementary Table S2. Fixed effect ANOVA of FBR severity and incidence of intermediate maturing cultivars comprising the original, intermediate, and advanced selected populations evaluated for four seasons.

| | | NuMex Chaco | | | NuMex Mesa | | | NuMex Crispy | |
| | | Sev.[y] | Inc.[z] | | Sev.[y] | Inc.[z] | | Sev.[y] | Inc.[z] |
Source[w]	df	P-value	P-value	df	P-value	P-value	df	P-value	P-value
Intermediate selections with their parents									
Year	3	0.004**	0.01*	3	0.03*	0.13	3	0.0004***	0.001**
Popln.	2	0.08	0.09	2	0.06	0.03*	2	0.02*	0.03*
Year x Popln.	6	0.07	0.08	5	0.02*	0.004**	6	0.27	0.05
Advanced selections with their parents									
Year	1	0.22	0.16	1	0.01*	0.04	1	0.03*	0.03*
Popln.	2	0.01*	0.006**	2	0.64	0.48	2	0.02*	0.03*
Year x Popln.	2	0.15	0.04*	2	0.04*	0.08	2	0.71	0.54

[w]Entries were evaluated in a randomized complete block design with four replications from 2016 to 2019 summer seasons.

[y]Severity of FBR. After 20 days of disease development period twenty arbitrarily selected, inoculated bulbs were rated individually for FBR severity on a scale of 1 to 9, where 1= no symptoms, 2<10% basal plate decay, 3=11%-20%, 4=21%-30%, 5=31%-40%, 6=41%-50%, 7=51%- 60%, 8=61%-70%, and 9>70% of the basal plate is infected.

[z]Incidence of FBR, which is the percentage of 20 inoculated bulbs showing FBR symptoms, was calculated after 20 d of incubation.

*, **, ***Significantly different at $P < 0.05$, 0.01, and 0.001, respectively.

Supplementary Table S3. Fixed effect ANOVA of FBR severity and incidence of late maturing cultivars comprising the original, intermediate, and advanced selected populations evaluated for four seasons.
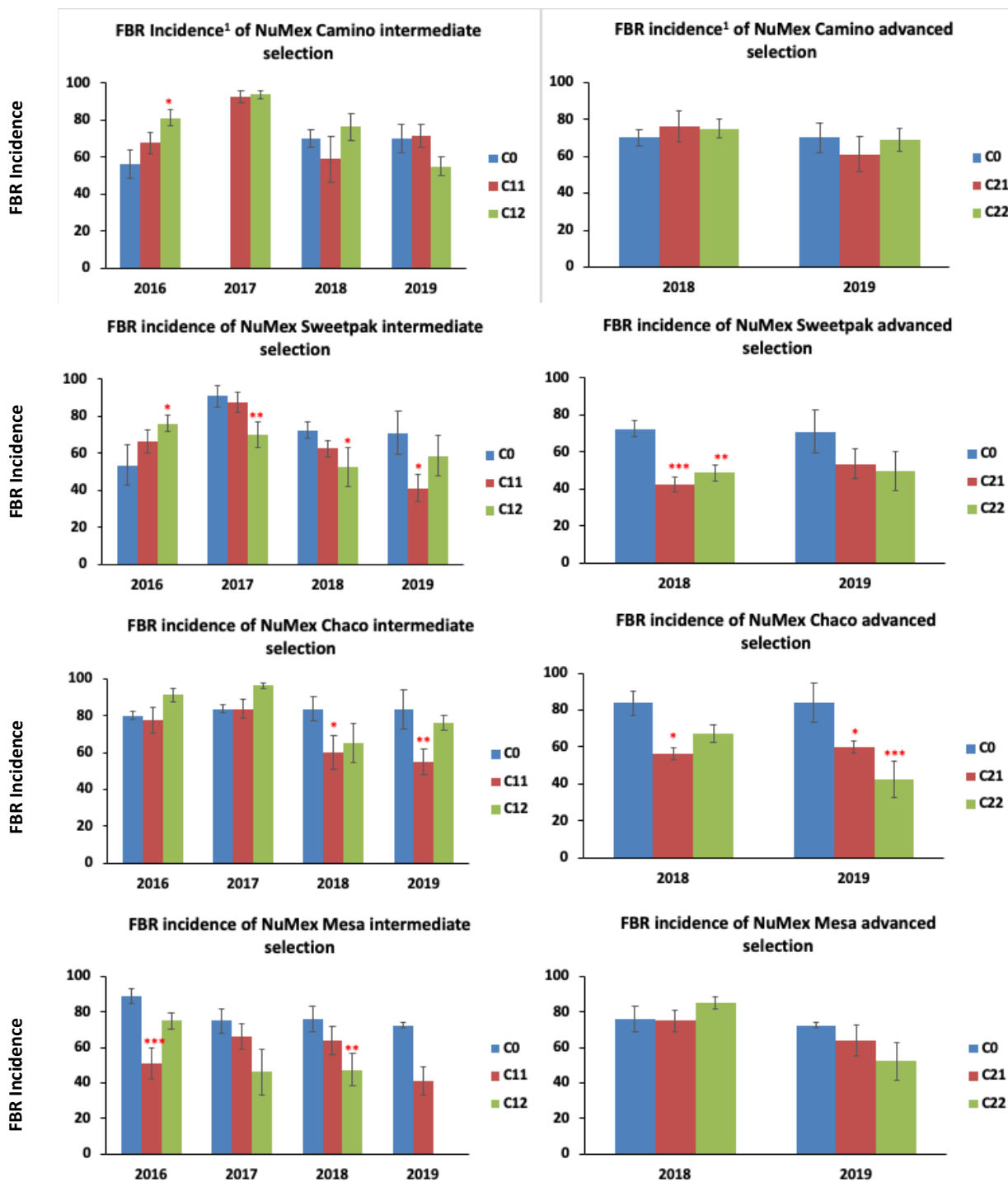
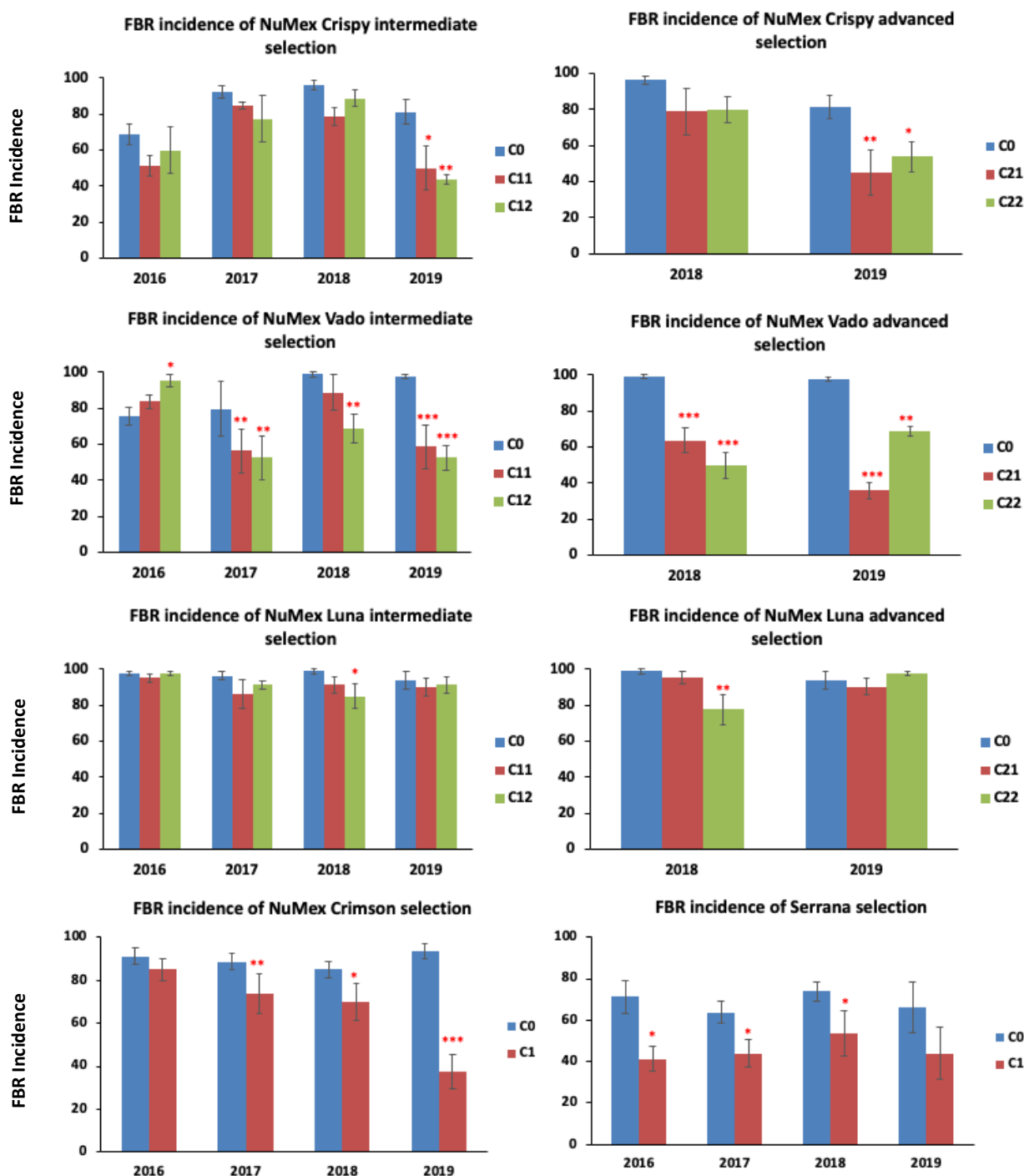| Source[w]	df	NuMex Vado Sev.[y] P-value	Inc.[z] P-value	df	NuMex Luna Sev.[y] P-value	Inc.[z] P-value
Intermediate selections with their parents						
Year	3	0.01*	0.09	3	0.40	0.65
Populations	2	0.02*	0.01*	2	0.04**	0.07
Year x Popl.	6	0.0007***	0.05	6	0.07	0.28
Advanced selections with their parents						
Year	1	0.34	0.63	1	0.68	0.53
Populations	2	0.0003***	0.0002***	2	0.02*	0.17
Year x Popl.	2	0.02*	0.008**	2	0.02*	0.01*

[w]were evaluated in a randomized complete block design with four replications from 2016 to 2019 summer seasons.

[y]Severity of FBR. After 20 days of disease development period twenty arbitrarily selected, inoculated bulbs were rated individually for FBR severity on a scale of 1 to 9, where 1= no symptoms, 2<10% basal plate decay, 3=11%-20%, 4=21%-30%, 5=31%-40%, 6=41%-50%, 7=51%- 60%, 8=61%-70%, and 9>70% of the basal plate is infected.

[z]Incidence of FBR, which is the percentage of 20 inoculated bulbs showing FBR symptoms, was calculated after 20 d of incubation.

*, **, ***Significantly different at $P < 0.05$, 0.01, and 0.001, respectively.

FBR Incidence[1] of NuMex Camino intermediate selection

FBR incidence[1] of NuMex Camino advanced selection

FBR incidence of NuMex Sweetpak intermediate selection

FBR incidence of NuMex Sweetpak advanced selection

FBR incidence of NuMex Chaco intermediate selection

FBR incidence of NuMex Chaco advanced selection

FBR incidence of NuMex Mesa intermediate selection

FBR incidence of NuMex Mesa advanced selection

Supplementary Figure S1. FBR incidence of the seven cultivars and two checks, comprising the parental or C0 populations with their first cycle of selected populations, C1, C11 and C12, and second cycle of selected populations, C21 and C22, evaluated for four and two seasons, respectively. [1]FBR incidence, which is the percentage of 20 inoculated bulbs showing FBR symptoms, was calculated after 20 d of incubation. *, **, ***Significantly different from C0 at $P < 0.05$, 0.01, and 0.001, respectively, in each year.