US-NPN Timeline Figures

Figure 1: Day of budburst and the day of leaf out for native tree species in New England. Data was collected from a growth chamber experiment using any combination of two photoperiod treatments, two forcing treatments, and three chilling treatments. The standard deviation is represented in blue for budburst and green for leaf out.

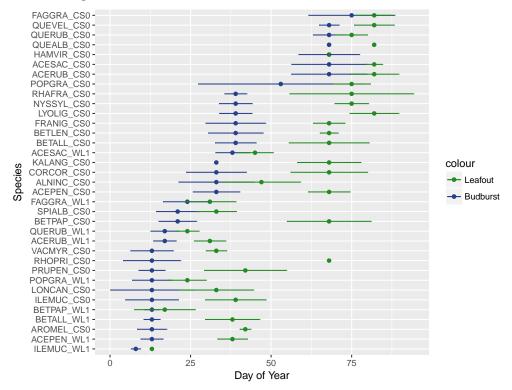


Table 1: Anova results for duration of vegetative risk by chilling, forcing, and photoperiod effects for each species.

| | ACEPEN.Sum.Sq | ACEPEN.Df | ACEPEN.F.value | ACEPEN.PrF. |
|---|---------------|-----------|----------------|-------------|
| 1 | 119.12 | 1.00 | 1.92 | 0.17 |
| 2 | 4883.47 | 1.00 | 78.90 | 0.00 |
| 3 | 1300.30 | 1.00 | 21.01 | 0.00 |
| 4 | 6684.85 | 108.00 | | |

| | ACERUB.Sum.Sq | ACERUB.Df | ACERUB.F.value | ACERUB.PrF. |
|----------------------------|--|--|--|-------------------------------------|
| 1 | 0.62 | 1.00 | 0.01 | 0.92 |
| 2 | 1742.33 | 1.00 | 26.35 | 0.00 |
| 3 | 462.88 | 1.00 | 7.00 | 0.01 |
| 4 | 6611.18 | 100.00 | | |
| | | | | |
| _ | ACESAC.Sum.Sq | ACESAC.Df | ACESAC.F.value | ACESAC.PrF. |
| 1 | 15.54 | 1.00 | 0.22 | 0.64 |
| 2 | 269.90 | 1.00 | 3.78 | 0.06 |
| 3 | 224.83 | 1.00 | 3.15 | 0.08 |
| _4 | 4574.75 | 64.00 | | |
| _ | ALNINC.Sum.Sq | ALNINC.Df | ALNINC.F.value | ALNINC.PrF. |
| _ | 1 | 0.00 | | |
| | 2 1025.10 | 1.00 | 5.96 | 0.02 |
| | 3 198.55 | 1.00 | 1.15 | 0.29 |
| 4 | 4 6709.50 | 39.00 | | |
| | | | | |
| | AROMEL.Sum.Sq | AROMEL.Df | AROMEL.F.value | AROMEL.PrF. |
| 1 | | 0.00 | | |
| 2 | 374.08 | 1.00 | 40.04 | 0.00 |
| 3 | 126.75 | 1.00 | 13.57 | 0.01 |
| 4 | | 1.00 | 10.01 | |
| | 84.08 | 9.00 | 10.01 | |
| _ | | 9.00 | | RETALL Pr F |
| _ | BETALL.Sum.Sq | 9.00 BETALL.Df | BETALL.F.value | BETALL.PrF. |
| | BETALL.Sum.Sq 1 287.15 | 9.00 BETALL.Df 1.00 | BETALL.F.value 5.32 | 0.02 |
| 2 | BETALL.Sum.Sq 1 287.15 2 1464.43 | 9.00 BETALL.Df 1.00 1.00 | BETALL.F.value 5.32 27.11 | 0.02 0.00 |
| 9 | BETALL.Sum.Sq 1 287.15 2 1464.43 3 617.15 | 9.00 BETALL.Df 1.00 1.00 | BETALL.F.value 5.32 | 0.02 |
| 9 | BETALL.Sum.Sq 1 287.15 2 1464.43 | 9.00 BETALL.Df 1.00 1.00 | BETALL.F.value 5.32 27.11 | 0.02 0.00 |
| 9 | BETALL.Sum.Sq 1 287.15 2 1464.43 3 617.15 | 9.00 BETALL.Df 1.00 1.00 | BETALL.F.value 5.32 27.11 | 0.02 0.00 |
| 3 | BETALL.Sum.Sq 1 287.15 2 1464.43 3 617.15 4 7183.30 BETLEN.Sum.Sq | 9.00 BETALL.Df 1.00 1.00 1.33.00 | BETALL.F.value 5.32 27.11 11.43 | 0.02 0.00 0.00 |
| - | BETALL.Sum.Sq 1 287.15 2 1464.43 3 617.15 4 7183.30 BETLEN.Sum.Sq | 9.00 BETALL.Df 1.00 1.00 1.00 133.00 BETLEN.Df | BETALL.F.value 5.32 27.11 11.43 | 0.02 0.00 0.00 |
| 2 2 2 2 - 1 | BETALL.Sum.Sq 1 287.15 2 1464.43 3 617.15 4 7183.30 BETLEN.Sum.Sq 1383.03 | 9.00 BETALL.Df 1.00 1.00 1.33.00 BETLEN.Df 0.00 | BETALL.F.value 5.32 27.11 11.43 BETLEN.F.value | 0.02 0.00 0.00 BETLEN.PrF. |
| $\frac{2}{3}$ | BETALL.Sum.Sq 1 287.15 2 1464.43 3 617.15 4 7183.30 BETLEN.Sum.Sq 1383.03 539.58 | 9.00 BETALL.Df 1.00 1.00 1.33.00 BETLEN.Df 0.00 1.00 | BETALL.F.value 5.32 27.11 11.43 BETLEN.F.value | 0.02 0.00 0.00 BETLEN.PrF. |

| | BETPAP.Sum.Sq | BETPAP.Df | BETPAP.F.value | BETPAP.PrF. |
|-----------------------|--|---|---|---|
| 1 | 4.55 | 1.00 | 0.06 | 0.81 |
| 2 | 1780.62 | 1.00 | 21.68 | 0.00 |
| 3 | 1104.06 | 1.00 | 13.45 | 0.00 |
| 4 | 10510.45 | 128.00 | | |
| | | COD COD D4 | GODGOD F. J | CODCODD |
| | CORCOR.Sum.Sq | CORCOR.Df | CORCOR.F.value | CORCOR.PrF. |
| 1 | 0.44.05 | 0.00 | 44.00 | |
| 2 | 941.67 | 1.00 | 14.26 | 0.00 |
| 3 | 660.25 | 1.00 | 10.00 | 0.00 |
| 4 | 2707.30 | 41.00 | | |
| | FAGGRA.Sum.Sq | FAGGRA.Df | FAGGRA.F.value | FAGGRA.PrF. |
| 1 | 60.29 | 1.00 | 1.37 | 0.25 |
| 2 | 722.34 | 1.00 | 16.36 | 0.00 |
| 3 | 2.08 | 1.00 | 0.05 | 0.83 |
| 4 | 2913.91 | 66.00 | | |
| | FRANIG.Sum.Sq | FRANIG.Df | FRANIG.F.value | FRANIG.PrF. |
| | r ttarvio.buiii.bq | 0.00 | FILANIG.F.value | TRANIG.I II'. |
| 2 | 1094.34 | 1.00 | 23.11 | 0.00 |
| 3 | 519.11 | 1.00 | 10.96 | 0.00 |
| 9 | 010.11 | 1.00 | 10.00 | 0.00 |
| 4 | 1799 04 | 38 00 | | |
| 4 | 1799.04 | 38.00 | | |
| 4 | 1799.04 HAMVIR.Sum.Sq | 38.00 HAMVIR.Df | HAMVIR.F.value | HAMVIR.PrF. |
| 1 | | | HAMVIR.F.value | HAMVIR.PrF. |
| | | HAMVIR.Df | HAMVIR.F.value | HAMVIR.PrF. |
| 1 | HAMVIR.Sum.Sq | HAMVIR.Df 0.00 | | |
| 1 2 | HAMVIR.Sum.Sq 92.04 | HAMVIR.Df 0.00 1.00 | 3.37 | 0.08 |
| 1 2 3 | 92.04 5.04 573.88 | HAMVIR.Df 0.00 1.00 1.00 21.00 | 3.37 0.18 | 0.08 0.67 |
| 1 2 3 4 | HAMVIR.Sum.Sq 92.04 5.04 573.88 ILEMUC.Sum.Sq | HAMVIR.Df 0.00 1.00 1.00 21.00 ILEMUC.Df | 3.37 0.18 ILEMUC.F.value | 0.08 0.67 ILEMUC.PrF. |
| 1 2 3 4 — | HAMVIR.Sum.Sq 92.04 5.04 573.88 ILEMUC.Sum.Sq 25.63 | HAMVIR.Df 0.00 1.00 1.00 21.00 ILEMUC.Df 1.00 | 3.37 0.18 ILEMUC.F.value 1.05 | 0.08 0.67 ILEMUC.PrF. 0.31 |
| 1 2 3 4 — — — — — 1 2 | HAMVIR.Sum.Sq 92.04 5.04 573.88 ILEMUC.Sum.Sq 25.63 2262.82 | HAMVIR.Df 0.00 1.00 1.00 21.00 ILEMUC.Df 1.00 1.00 | 3.37 0.18 ILEMUC.F.value 1.05 92.28 | 0.08 0.67 ILEMUC.PrF. 0.31 0.00 |
| 1 2 3 4 — | HAMVIR.Sum.Sq 92.04 5.04 573.88 ILEMUC.Sum.Sq 25.63 | HAMVIR.Df 0.00 1.00 1.00 21.00 ILEMUC.Df 1.00 | 3.37 0.18 ILEMUC.F.value 1.05 | 0.08 0.67 ILEMUC.PrF. 0.31 |

| | KALANG.Sum.Sq | KALANG.Df | KALANG.F.value | KALANG.PrF. |
|-----|---------------|-----------|----------------|-------------|
| 1 | | 0.00 | | |
| 2 | 1362.43 | 1.00 | 10.22 | 0.02 |
| 3 | 1145.83 | 1.00 | 8.60 | 0.02 |
| 4 | 933.00 | 7.00 | | |
| | LONCAN.Sum.Sq | LONCAN.Df | LONCAN.F.value | LONCAN.PrF. |
| 1 | | 0.00 | | |
| 2 | 264.73 | 1.00 | 9.72 | 0.00 |
| 3 | 506.70 | 1.00 | 18.61 | 0.00 |
| 4 | 871.35 | 32.00 | | |
| _ | LYOLIG.Sum.Sq | LYOLIG.Df | LYOLIG.F.value | LYOLIG.PrF. |
| _ | 1 | 0.00 | | |
| | 2 2028.26 | 1.00 | 44.70 | 0.00 |
| | 3 76.41 | 1.00 | 1.68 | 0.21 |
| _ | 4 862.11 | 19.00 | | |
| | NYSSYL.Sum.Sq | NYSSYL.Df | NYSSYL.F.value | NYSSYL.PrF. |
| | | 0.00 | | |
| 2 | 1269.62 | 1.00 | 31.36 | 0.00 |
| ć | 317.40 | 1.00 | 7.84 | 0.01 |
| _ 4 | 809.78 | 20.00 | | |
| | POPGRA.Sum.Sq | POPGRA.Df | POPGRA.F.value | POPGRA.PrF. |
| 1 | 37.71 | 1.00 | 0.55 | 0.46 |
| 2 | 2412.42 | 1.00 | 34.88 | 0.00 |
| 3 | 1013.13 | 1.00 | 14.65 | 0.00 |
| 4 | 6777.91 | 98.00 | | |
| | PRUPEN.Sum.Sq | PRUPEN.Df | PRUPEN.F.value | PRUPEN.PrF. |
| 1 | | 0.00 | | |
| 2 | 1976.57 | 1.00 | 25.22 | 0.00 |
| 3 | 402.76 | 1.00 | 5.14 | 0.03 |
| | | | | |

| | QUEALB.Sum.Sq | QUEALB.Df | QUEALB.F.value | QUEALB.PrF. |
|----|---------------|------------|----------------|-------------|
| 1 | | 0.00 | | |
| 2 | 310.08 | 1.00 | 1.81 | 0.22 |
| 3 | 56.37 | 1.00 | 0.33 | 0.58 |
| 4 | 1370.35 | 8.00 | | |
| | | | | |
| | QUERUB.Sum.Sq | QUERUB.Df | QUERUB.F.value | QUERUB.PrF. |
| 1 | 9.36 1.0 | | 0.24 | 0.63 |
| 2 | 697.68 | 1.00 | 17.82 | 0.00 |
| 3 | 370.05 | 1.00 | 9.45 | 0.00 |
| 4 | 4972.54 | 127.00 | | |
| | | | | |
| | QUEVEL.Sum.Sq | QUEVEL.Df | QUEVEL.F.value | QUEVEL.PrF. |
| 1 | | 0.00 | | |
| 2 | 0.66 | 1.00 | 0.02 | 0.90 |
| 3 | 3.05 | 1.00 | 0.08 | 0.78 |
| 4 | 615.94 | 16.00 | | |
| | DIIAEDA C C | DILAEDA DC | DILADDAD | |
| -1 | RHAFRA.Sum.Sq | RHAFRA.Df | RHAFRA.F.value | RHAFRA.PrF. |
| 1 | 400 71 | 0.00 | 0.10 | 0.00 |
| 2 | 426.51 | 1.00 | 6.16 | 0.02 |
| 3 | 113.90 | 1.00 | 1.64 | 0.22 |
| 4 | 1246.57 | 18.00 | | |
| - | RHOPRI.Sum.Sq | RHOPRI.Df | RHOPRI.F.value | RHOPRI.PrF. |
| 1 | - | 0.00 | | |
| 2 | 676.10 | 1.00 | 3.73 | 0.07 |
| 3 | 717.19 | 1.00 | 3.95 | 0.06 |
| 4 | 3445.54 | 19.00 | | |
| | | | | |
| _ | SPIALB.Sum.Sq | SPIALB.Df | SPIALB.F.value | SPIALB.PrF. |
| _ | 1 | 0.00 | | |
| | 2 54.14 | 1.00 | 1.22 | 0.28 |
| | | 1.00 | 0.54 | 0.47 |
| | 3 23.87 | 1.00 | 0.54 | 0.47 |

| | VACMYR.Sum.Sq | VACMYR.Df | VACMYR.F.value | VACMYR.PrF. |
|---|---------------|-----------|----------------|-------------|
| 1 | | 0.00 | | |
| 2 | 549.82 | 1.00 | 15.60 | 0.00 |
| 3 | 62.38 | 1.00 | 1.77 | 0.19 |
| 4 | 1480.58 | 42.00 | | |