RÅFILA FRA ANALYSE:

<mark>1</mark>; -52209.50397; 0.00000; -52240.01742; 30.51346; 0.00000; 0;

 $[0.029287949259246354] ((((Secale 339:0.00809546731322765:0.03203510185564709, (((((T_monococc\ um_a 10:6.455180397155074E-5:0.16667357869818286, T_urartu 290:6.455180397155074E-5:0.06555114790530336):3.511964707433766E-$

5:0.05177625142385067,T_monococcum_m331:9.96714510458884E-

5:0.25302246026213554):0.005920303225309385:0.00631327326974467,A_muticum133:0.006019974 676355273:0.20278355070462742):5.203664162676423E-

4:0.04582061314449317,T_caputmedusae91:0.006540341092622915:0.05739419937510965):6.82677 4852505884E-4:0.0409935769402713,(Ae speltoides l38:2.3795563497046584E-

4:0.07734446770797214,Ae speltoides 98:2.3795563497046584E-

4: 0.07318066324839093): 0.006985062942903038: 0.0156949453084416): 8.72448735354147E-10.07318066324839093

4:0.19705069269849929):0.002091885979497268:0.24547020227268818,Agropyron72:0.01018735329 2724919:0.0846921723819346):6.621690453308005E-

4:0.16123430576491354, Hordeum222:0.01084952233805572:0.12648537908319965):0.103180637545 93416:0.07951153707504217, Brachypodium4:0.1140301598839898:0.08366865837759752);

<mark>2</mark>; <mark>-52192.60694</mark>; 0.00000; <mark>-52221.34757</mark>; 28.74064; 0.00000; 0;

 $[0.02607250804395928] (((((A_muticum133:0.006900715019861484:0.01630562469005771,((T_urartu 290:2.1753061789724938E-5:0.14244994981261183,T_monococcum_m331:2.1753061789724938E-5:0.22524383909891577):4.8992636678561944E-$

5:0.04609188303985548,T monococcum a10:7.074569846828689E-

4:0.040790097463440006,T_caputmedusae91:0.007188929547509059:0.10079991805094149):6.2944 46318222541E-4:0.03649300792845575,(Ae_speltoides_98:3.076543423825493E-

4:0.2227412046579656,Ae_speltoides_l38:3.076543423825493E-

4: 0.028833368624944927): 0.007510719836948764: 0.013971841598798725): 1.835583001240492E-10.013971841598798725 = 0.0013971841598798725 = 0.0013971841598798725 = 0.0013971841598798725 = 0.0013971841598798725 = 0.0013971841598798725 = 0.0013971841598798725 = 0.0013971841598798725 = 0.0013971841598798725 = 0.0013971841598798725 = 0.0013971841598798725 = 0.0013971841598798725 = 0.0013971841598798725 = 0.0013971841598798725 = 0.0013971841598798725 = 0.0013971841598798725 = 0.0013971841598798725 = 0.0013971841598798725 = 0.0013971841598798725 = 0.0013971841598798725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.00139718415 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.0013971841598725 = 0.001397184159725 = 0.001397184159725 = 0.001397184159725 = 0.001397184159725 = 0.001397184159725 = 0.0013971841575 = 0.0013971841575 = 0.0013971841575 = 0.0013971841575 = 0.0013971841575 = 0.0013971841575 = 0.0013971841575 = 0.0013971841575 = 0.0013971841575 = 0.0013971841575 = 0.0013971841575 = 0.0013971841575 = 0.0013971841575 = 0.0013971841575 = 0.0013971841575 = 0.0013971841575 = 0.0013971841575 = 0.0013971841575 = 0.0013971841575 = 0.0013971841575 = 0.0013971841575 = 0.0013971841575 = 0.0013971841575 = 0.001371841575 = 0.00137187575 = 0.00137187575 = 0.00137187575 = 0.0013718717575 = 0.0013717575 = 0.0013717575 = 0.0013717575 = 0.0013717575 = 0.001371757575 = 0.00137

4:0.028458218629482827,Secale339:0.008001932479455362:0.17921896482610064):0.003371721720 7139324:0.2185207221801797,(Hordeum222:0.007172461370502953:0.11259890661511004,Agropyro n72:0.007172461370502953:0.07539405801829077):0.004201192829666342:0.1605738522547356):0. 10718992048044707:0.07078219002725589,Brachypodium4:0.11856357468061636:0.1969853125651 1842);

<mark>3</mark>; <mark>-52204.60909</mark>; 0.00000; <mark>-52226.64324</mark>; 22.03415; 0.00000; 0;

[0.029684174105737756](((((Ae_speltoides_98:3.911694876536364E-

4:0.2535961898426079, Ae speltoides l38:3.911694876536364E-

6:0.16892843828392226):8.532827512399982E-

5:0.05247671143526097,T urartu290:9.005179919015524E-

5:0.1453960848300199):0.006927691673783394:0.006398682996114405,A_muticum133:0.007017743 472973549:0.01938024966670558):3.453271064967709E-

4:0.04526930845578589,T_caputmedusae91:0.00736307057947032:0.128566790876458):4.05922311 81221447E-4:0.041548162499899184):4.236448286846668E-

4:0.02000085286814364,Secale339:0.008192637719967201:0.37497388115231345):0.0032628655728 14763:0.3304733892169676,(Agropyron72:0.009866757559177415:0.15662285193730868,Hordeum22 2:0.009866757559177415:0.07714065111244119):0.0015887457336045494:0.33699628730327497):0. 10703852262939009:0.08058721657356181,Brachypodium4:0.11849402592217205:0.0173072301464 42084);

... osv

ETTER FØRSTE EDIT (ARNULF):

1; -52209.50397; 0.00000; -52240.01742; 30.51346; 0.00000; 0;

 $[0.029287949259246354] ((((Secale 339[\&popsize = 0.03203510185564709] : 0.00809546731322765, (((((T_monococcum_a10[\&popsize = 0.16667357869818286] : 6.455180397155074E-$

- 5,T urartu290[&popsize=0.06555114790530336]:6.455180397155074E-
- 5)[&popsize=0.05177625142385067]:3.511964707433766E-
- 5,T monococcum m331[&popsize=0.25302246026213554]:9.96714510458884E-
- 5)[&popsize=0.00631327326974467]:0.005920303225309385,A_muticum133[&popsize=0.2027835507 0462742]:0.006019974676355273)[&popsize=0.04582061314449317]:5.203664162676423E-
- $4, T_caput medusae 91 [\&popsize=0.05739419937510965] : 0.006540341092622915) [\&popsize=0.0409935769402713] : 6.826774852505884 E-$
- 4,(Ae_speltoides_l38[&popsize=0.07734446770797214]:2.3795563497046584E-
- 4,Ae_speltoides_98[&popsize=0.07318066324839093]:2.3795563497046584E-
- 4)[&popsize=0.0156949453084416]:0.006985062942903038)[&popsize=0.19705069269849929]:8.7244 8735354147E-
- 4)[&popsize=0.24547020227268818]:0.002091885979497268,Agropyron72[&popsize=0.084692172381 9346]:0.010187353292724919)[&popsize=0.16123430576491354]:6.621690453308005E-
- 4,Hordeum222[&popsize=0.12648537908319965]:0.01084952233805572)[&popsize=0.0795115370750 4217]:0.10318063754593416,Brachypodium4[&popsize=0.08366865837759752]:0.11403015988398989);
- <mark>2</mark>; <mark>-52192.60694</mark>; 0.00000; <mark>-52221.34757</mark>; 28.74064; 0.00000; 0;

 $[0.02607250804395928] ((((((A_muticum133[\&popsize=0.01630562469005771]:0.006900715019861484), ((T_urartu290[\&popsize=0.14244994981261183]:2.1753061789724938E-$

5,T_monococcum_m331[&popsize=0.22524383909891577]:2.1753061789724938E-

- 5)[&popsize=0.04609188303985548]:4.8992636678561944E-
- 5,T_monococcum_a10[&popsize=0.14837495731975583]:7.074569846828689E-
- 5)[&popsize=0.005620156831471054]:0.006829969321393197)[&popsize=0.040790097463440006]:2.8 82145276475751E-
- 4,T_caputmedusae91[&popsize=0.10079991805094149]:0.007188929547509059)[&popsize=0.0364930 0792845575]:6.294446318222541E-
- 4,(Ae speltoides 98[&popsize=0.2227412046579656]:3.076543423825493E-
- 4,Ae_speltoides_l38[&popsize=0.028833368624944927]:3.076543423825493E-
- 4)[&popsize=0.013971841598798725]:0.007510719836948764)[&popsize=0.028458218629482827]:1.8 35583001240492E-
- 4,Secale339[&popsize=0.17921896482610064]:0.008001932479455362)[&popsize=0.218520722180179 7]:0.0033717217207139324,(Hordeum222[&popsize=0.11259890661511004]:0.007172461370502953, Agropyron72[&popsize=0.07539405801829077]:0.007172461370502953)[&popsize=0.16057385225473 56]:0.004201192829666342)[&popsize=0.07078219002725589]:0.10718992048044707,Brachypodium4 [&popsize=0.19698531256511842]:0.11856357468061636);
- 3; -52204.60909; 0.00000; -52226.64324; 22.03415; 0.00000; 0;

 $[0.029684174105737756] (((((Ae_speltoides_98[\&popsize=0.2535961898426079]:3.911694876536364E-4,Ae_speltoides_l38[\&popsize=0.03282747992155989]:3.911694876536364E-4,Ae_speltoides_l38[\&popsize=0.03282747992155989]:3.911694876536364E-4,Ae_speltoides_l38[\&popsize=0.03282747992155989]:3.911694876536364E-4,Ae_speltoides_l38[\&popsize=0.03282747992155989]:3.911694876536364E-4,Ae_speltoides_l38[\&popsize=0.03282747992155989]:3.911694876536364E-4,Ae_speltoides_l38[\&popsize=0.03282747992155989]:3.911694876536364E-4,Ae_speltoides_l38[\&popsize=0.03282747992155989]:3.911694876536364E-4,Ae_speltoides_l38[\&popsize=0.03282747992155989]:3.911694876536364E-4,Ae_speltoides_l38[\&popsize=0.03282747992155989]:3.911694876536364E-4,Ae_speltoides_l38[\&popsize=0.03282747992155989]:3.911694876536364E-4,Ae_speltoides_l38[\&popsize=0.03282747992155989]:3.911694876536364E-4,Ae_speltoides_l38[\&popsize=0.03282747992155989]:3.911694876536364E-4,Ae_speltoides_l38[\&popsize=0.03282747992155989]:3.911694876536364E-4,Ae_speltoides_l38[\&popsize=0.03282747992155989]:3.911694876536364E-4,Ae_speltoides_l38[\&popsize=0.0328274799215598]:3.91169487653664E-4,Ae_speltoides_l38[\&popsize=0.0328274799215598]:3.91169487653664E-4,Ae_speltoides_l38[\&popsize=0.0328274799215598]:3.91169487653664E-4,Ae_speltoides_l38[\&popsize=0.0328274799215598]:3.91169487653664E-4,Ae_speltoides_l38[\&popsize=0.0328274799215598]:3.9116948664E-4,Ae_speltoides_l38[\&popsize=0.0328274799215598]:3.9116948664E-4,Ae_speltoides_l38[\&popsize=0.0328274799215598]:3.9116948665464E-4,Ae_speltoides_l38[\&popsize=0.0328274799215598]:3.91169486664E-4,Ae_speltoides_l38[\&popsize=0.0328274799215598]:3.91169486665464E-4,Ae_speltoides_l38[\&popsize=0.032827479921598]:3.91169486665464E-4,Ae_speltoides_l38[\&popsize=0.032827479921598]$

- 4)[&popsize=0.015907275889885945]:0.007377823403628898,((((T_monococcum_m331[&popsize=0.0 3951215112600869]:4.7235240661554174E-
- 6,T_monococcum_a10[&popsize=0.16892843828392226]:4.7235240661554174E-
- 6)[&popsize=0.05247671143526097]:8.532827512399982E-
- 5,T_urartu290[&popsize=0.1453960848300199]:9.005179919015524E-
- 5)[&popsize=0.006398682996114405]:0.006927691673783394,A_muticum133[&popsize=0.019380249 66670558]:0.007017743472973549)[&popsize=0.04526930845578589]:3.453271064967709E-
- $\label{eq:control_state} 4, Secale 339 [\&popsize = 0.37497388115231345] : 0.008192637719967201) [\&popsize = 0.3304733892169676] : 0.003262865572814763, (Agropyron 72 [\&popsize = 0.15662285193730868] : 0.009866757559177415, Hordeum 222 [\&popsize = 0.07714065111244119] : 0.009866757559177415) [\&popsize = 0.33699628730327497] : 0.0015887457336045494) [\&popsize = 0.08058721657356181] : 0.10703852262939009, Brachypodium 4 [\&popsize = 0.017307230146442084] : 0.11849402592217205);$

ETTER ANDRE EDIT (MITT SNEGLESCRIPT I R):

#NEXUS

Begin trees;

```
tree STATE_\frac{0}{0} [&InP=\frac{-52240.02}{0}, posterior=\frac{-52209.5}{0}] = [&R]
ize=0.16667357869818286]:6.455180397155074E-
5,T urartu290[&popsize=0.06555114790530336]:6.455180397155074E-
5)[&popsize=0.05177625142385067]:3.511964707433766E-
5,T monococcum m331[&popsize=0.25302246026213554]:9.96714510458884E-
5)[&popsize=0.00631327326974467]:0.005920303225309385,A muticum133[&popsize=0.2027835507
0462742]:0.006019974676355273)[&popsize=0.04582061314449317]:5.203664162676423E-
4,T caputmedusae91[&popsize=0.05739419937510965]:0.006540341092622915)[&popsize=0.0409935
769402713]:6.826774852505884E-
4,(Ae_speltoides_l38[&popsize=0.07734446770797214]:2.3795563497046584E-
4,Ae speltoides 98[&popsize=0.07318066324839093]:2.3795563497046584E-
4)[&popsize=0.0156949453084416]:0.006985062942903038)[&popsize=0.19705069269849929]:8.7244
8735354147E-
4)[&popsize=0.24547020227268818]:0.002091885979497268,Agropyron72[&popsize=0.084692172381
9346]:0.010187353292724919)[&popsize=0.16123430576491354]:6.621690453308005E-
4,Hordeum222[&popsize=0.12648537908319965]:0.01084952233805572)[&popsize=0.0795115370750
4217]:0.10318063754593416,Brachypodium4[&popsize=0.08366865837759752]:0.11403015988398989
);
tree STATE_1 [&InP=-52240.02,posterior=-52209.5] = [&R]
ize=0.16667357869818286]:6.455180397155074E-
5,T urartu290[&popsize=0.06555114790530336]:6.455180397155074E-
5)[&popsize=0.05177625142385067]:3.511964707433766E-
5,T monococcum m331[&popsize=0.25302246026213554]:9.96714510458884E-
5)[&popsize=0.00631327326974467]:0.005920303225309385,A muticum133[&popsize=0.2027835507
0462742]:0.006019974676355273)[&popsize=0.04582061314449317]:5.203664162676423E-
4,T_caputmedusae91[&popsize=0.05739419937510965]:0.006540341092622915)[&popsize=0.0409935
769402713]:6.826774852505884E-
4,(Ae speltoides | 138[&popsize=0.07734446770797214]:2.3795563497046584E-
4,Ae_speltoides_98[&popsize=0.07318066324839093]:2.3795563497046584E-
4)[&popsize=0.0156949453084416]:0.006985062942903038)[&popsize=0.19705069269849929]:8.7244
8735354147E-
4)[&popsize=0.24547020227268818]:0.002091885979497268,Agropyron72[&popsize=0.084692172381
9346]:0.010187353292724919)[&popsize=0.16123430576491354]:6.621690453308005E-
4,Hordeum222[&popsize=0.12648537908319965]:0.01084952233805572)[&popsize=0.0795115370750
4217]:0.10318063754593416,Brachypodium4[&popsize=0.08366865837759752]:0.11403015988398989
);
```

tree STATE_2 [&InP=-52221.35,posterior=-52192.61] = [&R] (((((A_muticum133[&popsize=0.01630562469005771]:0.006900715019861484,((T_urartu290[&popsize=0.14244994981261183]:2.1753061789724938E-

5,T_monococcum_m331[&popsize=0.22524383909891577]:2.1753061789724938E-

5)[&popsize=0.04609188303985548]:4.8992636678561944E-

- 5,T_monococcum_a10[&popsize=0.14837495731975583]:7.074569846828689E-
- 5)[&popsize=0.005620156831471054]:0.006829969321393197)[&popsize=0.040790097463440006]:2.8 82145276475751E-
- $4, T_caput medusae 91 [\&popsize=0.10079991805094149] : 0.007188929547509059) [\&popsize=0.03649300792845575] : 6.294446318222541 E-$
- 4,(Ae speltoides 98[&popsize=0.2227412046579656]:3.076543423825493E-
- 4)[&popsize=0.013971841598798725]:0.007510719836948764)[&popsize=0.028458218629482827]:1.8 35583001240492E-
- $\label{lem:control_second} 4, Secale 339 [\&popsize = 0.17921896482610064] : 0.008001932479455362) [\&popsize = 0.2185207221801797] : 0.0033717217207139324, (Hordeum 222 [\&popsize = 0.11259890661511004] : 0.007172461370502953, \\ Agropyron 72 [\&popsize = 0.07539405801829077] : 0.007172461370502953) [\&popsize = 0.1605738522547356] : 0.004201192829666342) [\&popsize = 0.07078219002725589] : 0.10718992048044707, Brachypodium 4 [\&popsize = 0.19698531256511842] : 0.11856357468061636);$

tree STATE 3 [&InP=-52226.64, posterior=-52204.61] = [&R]

- (((((Ae_speltoides_98[&popsize=0.2535961898426079]:3.911694876536364E-
- 4)[&popsize=0.015907275889885945]:0.007377823403628898,((((T_monococcum_m331[&popsize=0.0 3951215112600869]:4.7235240661554174E-
- 6,T_monococcum_a10[&popsize=0.16892843828392226]:4.7235240661554174E-
- 6)[&popsize=0.05247671143526097]:8.532827512399982E-
- 5,T_urartu290[&popsize=0.1453960848300199]:9.005179919015524E-
- 5)[&popsize=0.006398682996114405]:0.006927691673783394,A_muticum133[&popsize=0.019380249 66670558]:0.007017743472973549)[&popsize=0.04526930845578589]:3.453271064967709E-
- 4,Secale339[&popsize=0.37497388115231345]:0.008192637719967201)[&popsize=0.330473389216967 6]:0.003262865572814763,(Agropyron72[&popsize=0.15662285193730868]:0.009866757559177415,H ordeum222[&popsize=0.07714065111244119]:0.009866757559177415)[&popsize=0.336996287303274 97]:0.0015887457336045494)[&popsize=0.08058721657356181]:0.10703852262939009,Brachypodium 4[&popsize=0.017307230146442084]:0.11849402592217205);

end;