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1 lhs op rhs est
2 1 PC1 ~ FloCol 1
3 2 PC1 ~ StemCol 0.999311843607773
4 3 PC1 ~ LeafSize -0.7795907289144
5 4 PC1 ~ FlowStemCol 1.02570900630133
6 5 PC1 ~ NoPodsWeight -0.761100063940552
7 6 PC1 ~ PodLength -0.91787275252187
8 7 PC1 ~ PodWidth -0.950529413141881
9 8 PC1 ~ SeedCol 0.938916111527956
10 9 PC1 ~ Seed1000W -0.5496906767571
11 10 PC2 ~ PodWeight 1
12 11 PC2 ~ PodsNumber 0.958506432666448
13 12 PC2 ~ SeedsNumber 0.864950754500317
14 13 PC2 ~ SeedsWeight 1.08393578753563
15 14 PC4 ~ Germ 1
16 15 PC4 ~ BushShape 0.214517094621021
17 16 PC4 ~ AscoRes -2.82547872702397
18 17 PC4 ~ StemBr 1.68205798352845
19 18 PC4 ~ Height -12.4063281577058
20 19 PC4 ~ HlP -4.24591438696166
21 20 PC4 ~ SeedShape -0.108266135909914
22 21 PC5 ~ BegFEndF 1
23 22 PC5 ~ StemBr -0.221312813071901
24 23 PC5 ~ StemBr1ord -0.180794538501658
25 24 PC5 ~ StemBr2ord -0.098818345385781
26 25 PC5 ~ EndFBegM -1.28654273448264
27 26 PC7 ~ GBegF 1
28 27 PC7 ~ BegMEndM 0.494212731618465
29 28 PC7 ~ StemBr 0.712491422603304
30 29 PC7 ~ PodD 0.158982744668803
31 30 PC8 ~ BegMEndM 1
32 31 PC8 ~ StemL1ord 2.12908201334965
33 32 PC8 ~ PodS 2.06377037458539
34 33 PC8 ~ PodShape -4.37090546120091
35 34 PC7 ~ PC2 0.10482137737307
36 35 PC4 ~ PC8 -0.4414973299813902
37 36 PC5 ~ PC1 0.674580469792811
38 37 PC5 ~ PC8 3.46141852546511
39 38 PC1 ~ PC2 0.190630353975289
40 39 PC1 ~ PC8 -0.06665530563744
41 40 PC8 ~ PC2 0.0554127616503126
42 41 PC1 ~ snp13 0.414845895246133
43 42 PC1 ~ snp14 -0.20446813360839
44 43 PC1 ~ snp15 -0.238253718089958
45 44 PC2 ~ snp21 -0.269252682685898
46 45 PC2 ~ snp25 0.108891625420409
47 46 PC5 ~ snp54 -0.224157858870841
48 47 PC5 ~ snp55 -0.140282540472749
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145 144 snp15 ~ snp_PodS_1 -0.037692383099661
146 145 snp21 ~ snp21 0.373541809626507
147 146 snp21 ~ snp25 -0.379227526713067
148 147 snp21 ~ snp54 -0.071267527910831
149 148 snp21 ~ snp55 -0.0327663954514263
150 149 snp21 ~ snp71 0.0142878149210359
151 150 snp21 ~ snp75 -0.107955102440937
152 151 snp21 ~ snp81 0.107415939613763
153 152 snp21 ~ snp82 -0.041809265072052
154 153 snp21 ~ snp84 -0.135893539849034
155 154 snp21 ~ snp85 0.0338202137045388
156 155 snp21 ~ snp_FloCol_1 0.101289089380497
157 156 snp21 ~ snp_FlowStemCol_2 0.0216400352906578
158 157 snp21 ~ snp_NoPodsWeight_1 0.14383393784923
159 158 snp21 ~ snp_PodS_1 0.048206052295853
160 159 snp25 ~ snp25 0.778502107636506
161 160 snp25 ~ snp54 0.102686011175375
162 161 snp25 ~ snp55 -0.033281050877365
163 162 snp25 ~ snp71 0.0143613371238114
164 163 snp25 ~ snp75 0.143319282423292
165 164 snp25 ~ snp81 -0.1132241937066499
166 165 snp25 ~ snp82 0.0938633467307127
167 166 snp25 ~ snp84 0.182089991771336
168 167 snp25 ~ snp85 -0.044848542603666
169 168 snp25 ~ snp_FloCol_1 -0.125870012743840
170 169 snp25 ~ snp_FlowStemCol_2 -0.017908432506617
171 170 snp25 ~ snp_NoPodsWeight_1 -0.218017841380099
172 171 snp25 ~ snp_PodS_1 -0.0517106166062151
173 172 snp54 ~ snp54 0.679492206646407
174 173 snp54 ~ snp55 0.0382315459260699
175 174 snp54 ~ snp71 -0.00941004207430644
176 175 snp54 ~ snp75 0.0068787373786884
177 176 snp54 ~ snp81 -0.0278649152043917
178 177 snp54 ~ snp82 0.0546515047544358
179 178 snp54 ~ snp84 0.149593177139496
180 179 snp54 ~ snp85 0.0349475541613567
181 180 snp54 ~ snp_FloCol_1 -0.0424468189393197
182 181 snp54 ~ snp_FlowStemCol_2 0.0278894226056269
183 182 snp54 ~ snp_NoPodsWeight_1 -0.153269287324772
184 183 snp54 ~ snp_PodS_1 0.0071561616067052
185 184 snp55 ~ snp55 0.733580041172434
186 185 snp55 ~ snp71 -0.0706915908628566
187 186 snp55 ~ snp75 0.10017400254877
188 187 snp55 ~ snp81 0.0873198706009215
189 188 snp55 ~ snp82 -0.187187530634252
190 189 snp55 ~ snp84 0.151161650818547
191 190 snp55 ~ snp85 0.717981080286246
192 191 snp55 ~ snp_FloCol_1 0.0793182040976375
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40 48 PC7 ~ snp71 -0.193359430399149
50 49 PC7 ~ snp75 -0.612027803648612
51 50 PC8 ~ snp81 0.0147794574133875
52 51 PC8 ~ snp82 0.02286365593945
53 52 PC8 ~ snp84 -0.02181443146348
54 53 PC8 ~ snp85 -0.0348624451092556
55 54 FloCol ~ snp_FloCol_1 0.0996083251943915
56 55 FlowStemCol ~ snp_FlowStemCol_2 0.185421622660878
57 56 NoPodsWeight ~ snp_NoPodsWeight_1 -0.146549140820008
58 57 PodS ~ snp_PodS_1 -0.185541544321837
59 58 FloCol ~ FloCol 0.285731354130164
60 59 StemCol ~ StemCol 0.333366773458901
61 60 LeafSize ~ LeafSize 0.595009250791346
62 61 FlowStemCol ~ FlowStemCol 0.291230524661379
63 62 NoPodsWeight ~ NoPodsWeight 0.568716159484336
64 63 PodLength ~ PodLength 0.437207569968012
65 64 PodWidth ~ PodWidth 0.396627706249706
66 65 SeedCol ~ SeedCol 0.411220885183681
67 66 Seed1000W ~ Seed1000W 0.39100020773758
68 67 PodsWeight ~ PodsWeight 0.20652420853555
69 68 PodsNumber ~ PodsNumber 0.27806854626272
70 69 SeedsNumber ~ SeedsNumber 0.405746562491701
71 70 SeedsWeight ~ SeedsWeight 0.0697096066147699
72 71 Germ ~ Germ 0.988545502955006
73 72 BushShape ~ BushShape 0.997117749094324
74 73 AscoRes ~ AscoRes 0.92779420599163
75 74 StemBr ~ StemBr 0.892579983720065
76 75 Height ~ Height -0.34700096365548
77 76 HlP ~ HlP 0.840073618777033
78 77 SeedShape ~ SeedShape 0.997425738726849
79 78 BegFEndF ~ BegFEndF 0.36244540812626
80 79 StemBr1ord ~ StemBr1ord 0.976764868551082
81 80 StemBr2ord ~ StemBr2ord 0.991321495804551
82 81 EndFBegM ~ EndFBegM -0.0536339882517196
83 82 GBegF ~ GBegF 0.763261609772514
84 83 BegMEndM ~ BegMEndM 0.911076550882918
85 84 PodD ~ PodD 0.99160850841686
86 85 StemL1ord ~ StemL1ord 0.946872167117219
87 86 PodS ~ PodS 0.939146494962258
88 87 PodShape ~ PodShape 0.784118043153581
89 88 PC1 ~ PC1 -0.0469538628742689
90 89 PC2 ~ PC2 0.732447795875742
91 90 PC4 ~ PC4 0.006462589667069
92 91 PC5 ~ PC5 0.5701445233589
93 92 PC7 ~ PC7 0.096792009547296
94 93 PC8 ~ PC8 0.00550727091912438
95 94 PC4 ~ PC5 0.00198040415883753
96 95 PC4 ~ PC7 -0.00484381763588012
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193 192 snp55 ~ snp_FlowStemCol_2 0.00871238113910401
194 193 snp55 ~ snp_NoPodsWeight_1 0.0925154396627782
195 194 snp55 ~ snp_PodS_1 0.0253283991765513
196 195 snp71 ~ snp71 0.215487452210568
197 196 snp71 ~ snp75 -0.0225161748848152
198 197 snp71 ~ snp81 0.04307157576708166
199 198 snp71 ~ snp82 0.106987060092148
200 199 snp71 ~ snp84 -0.0384276051367513
201 200 snp71 ~ snp85 -0.007242182130006
202 201 snp71 ~ snp_FloCol_1 0.0118064405450446
203 202 snp71 ~ snp_FlowStemCol_2 -0.01531099899216743
204 203 snp71 ~ snp_NoPodsWeight_1 -0.0650426428781492
205 204 snp71 ~ snp_PodS_1 -0.02071488089403
206 205 snp75 ~ snp75 0.329397853151652
207 206 snp75 ~ snp81 -0.122647289481423
208 207 snp75 ~ snp82 -0.120392608567787
209 208 snp75 ~ snp84 0.270390157827664
210 209 snp75 ~ snp85 0.0978764336829722
211 210 snp75 ~ snp_FloCol_1 -0.110742819331438
212 211 snp75 ~ snp_FlowStemCol_2 -0.023435204311342
213 212 snp75 ~ snp_NoPodsWeight_1 -0.19836290559749
214 213 snp75 ~ snp_PodS_1 -0.00695397510048035
215 214 snp81 ~ snp81 0.911209685324968
216 215 snp81 ~ snp82 -0.0124742672287031
217 216 snp81 ~ snp84 -0.109458063916283
218 217 snp81 ~ snp85 0.095149985295559
219 218 snp81 ~ snp_FloCol_1 -0.145855798451132
220 219 snp81 ~ snp_FlowStemCol_2 -0.0176575825899422
221 220 snp81 ~ snp_NoPodsWeight_1 0.289505930791099
222 221 snp81 ~ snp_PodS_1 0.121421919419665
223 222 snp82 ~ snp82 0.807151259680423
224 223 snp82 ~ snp84 -0.175767081658661
225 224 snp82 ~ snp85 -0.185312714439761
226 225 snp82 ~ snp_FloCol_1 -0.124485344574061
227 226 snp82 ~ snp_FlowStemCol_2 0.0369449073620233
228 227 snp82 ~ snp_NoPodsWeight_1 -0.123541809626507
229 228 snp82 ~ snp_PodS_1 -0.076187734538298
230 229 snp84 ~ snp84 0.513479070679345
231 230 snp84 ~ snp85 0.157141456719929
232 231 snp84 ~ snp_FloCol_1 -0.149397117929615
233 232 snp84 ~ snp_FlowStemCol_2 -0.0399960788158024
234 233 snp84 ~ snp_NoPodsWeight_1 -0.23517302225272
235 234 snp84 ~ snp_PodS_1 -0.0244093716302233
236 235 snp85 ~ snp85 0.759195641211646
237 236 snp85 ~ snp_FloCol_1 0.0719353494755416
238 237 snp85 ~ snp_FlowStemCol_2 0.0170510244093716
239 238 snp85 ~ snp_NoPodsWeight_1 0.0931526320948926
240 239 snp85 ~ snp_PodS_1 0.0157888932457602
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97 96 PCs ~ PC7 0.129713892110236
98 97 snp13 ~ snp13 0.268527595333791
99 98 snp13 ~ snp14 0.267204195667891
100 99 snp13 ~ snp15 -0.036811166552299
101 100 snp13 ~ snp21 0.0422752671306735
102 101 snp13 ~ snp25 -0.0473973139888246
103 102 snp13 ~ snp54 0.00284285854328007
104 103 snp13 ~ snp55 0.0258798157043427
105 104 snp13 ~ snp71 -0.0186133712381139
106 105 snp13 ~ snp75 -0.0037377868836389
107 106 snp13 ~ snp81 0.117390451916479
108 107 snp13 ~ snp82 -0.0673463385942555
109 108 snp13 ~ snp84 -0.0189197137535536
110 109 snp13 ~ snp85 0.0215052445838643
111 110 snp13 ~ snp_FloCol_1 0.0198387412908726
112 111 snp13 ~ snp_FlowStemCol_2 0.00537937457112048
113 112 snp13 ~ snp_NoPodsWeight_1 0.110871483187923
114 113 snp13 ~ snp_PodS_1 0.280720027448289
115 114 snp14 ~ snp14 0.309822566415057
116 115 snp14 ~ snp15 -0.0451426330751087
117 116 snp14 ~ snp21 0.0468581511610508
118 117 snp14 ~ snp25 -0.0556808150663131
119 118 snp14 ~ snp54 0.011126360167686
120 119 snp14 ~ snp55 0.0367611018527595
121 120 snp14 ~ snp71 -0.0216155278894226
122 121 snp14 ~ snp75 0.0083251641995883
123 122 snp14 ~ snp81 0.130575433781002
124 123 snp14 ~ snp82 -0.0809234388785413
125 124 snp14 ~ snp84 -0.021811587099304
126 125 snp14 ~ snp85 0.029604940692089
127 126 snp14 ~ snp_FloCol_1 0.0273582597704531
128 127 snp14 ~ snp_FlowStemCol_2 0.00225468091363592
129 128 snp14 ~ snp_NoPodsWeight_1 0.126997353200667
130 129 snp14 ~ snp_PodS_1 0.291343985883737
131 130 snp15 ~ snp15 0.535192628173708
132 131 snp15 ~ snp21 -0.0668806979707872
133 132 snp15 ~ snp25 0.121997843340691
134 133 snp15 ~ snp54 0.0834477012057641
135 134 snp15 ~ snp55 -0.137658072737967
136 135 snp15 ~ snp71 0.0631310655810857
137 136 snp15 ~ snp75 -0.0624938731496912
138 137 snp15 ~ snp81 -0.0781891971375355
139 138 snp15 ~ snp82 0.194064307420041
140 139 snp15 ~ snp84 -0.10656210175473
141 140 snp15 ~ snp85 -0.136873835898441
142 141 snp15 ~ snp_FloCol_1 -0.077051269483384
143 142 snp15 ~ snp_FlowStemCol_2 0.0589893147730615
144 143 snp15 ~ snp_NoPodsWeight_1 -0.131678266836585
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```
241 240 snp_FloCol_1 ~ snp_FloCol_1 0.770384030977355
242 241 snp_FloCol_1 ~ snp_FlowStemCol_2 0.0979622095872954
243 242 snp_FloCol_1 ~ snp_NoPodsWeight_1 0.178732477208117
244 243 snp_FloCol_1 ~ snp_PodS_1 0.0266294775022057
245 244 snp_FlowStemCol_2 ~ snp_FlowStemCol_2 0.234064062346829
246 245 snp_FlowStemCol_2 ~ snp_NoPodsWeight_1 -0.0459758847171846
247 246 snp_FlowStemCol_2 ~ snp_PodS_1 0.00814258406038624
248 247 snp_NoPodsWeight_1 ~ snp_NoPodsWeight_1 0.948240368591315
249 248 snp_NoPodsWeight_1 ~ snp_PodS_1 0.115723948632487
250 249 snp_PodS_1 ~ snp_PodS_1 0.309938976570924
```