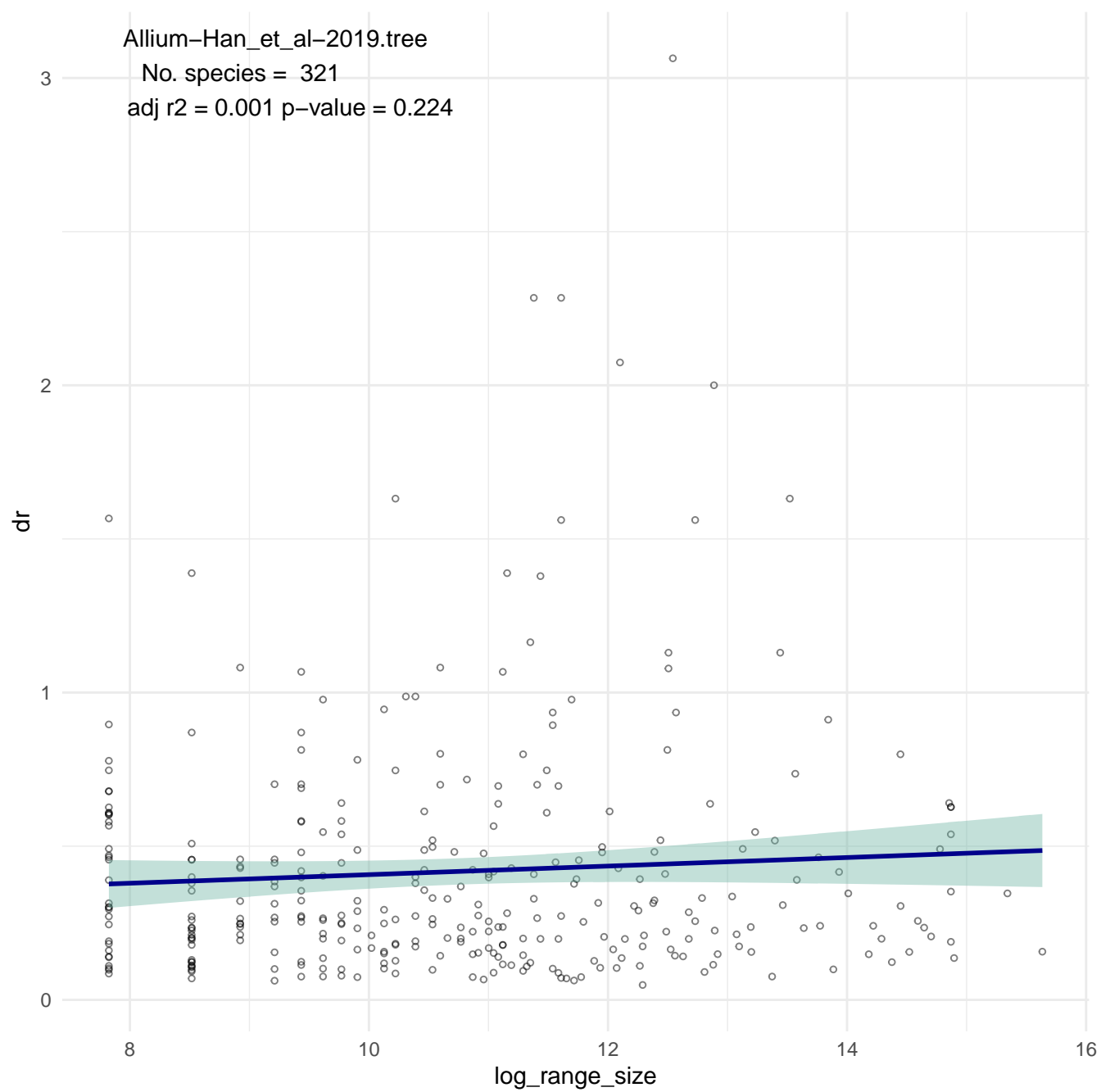


Allium-Han\_et\_al-2019.tree

No. species = 321

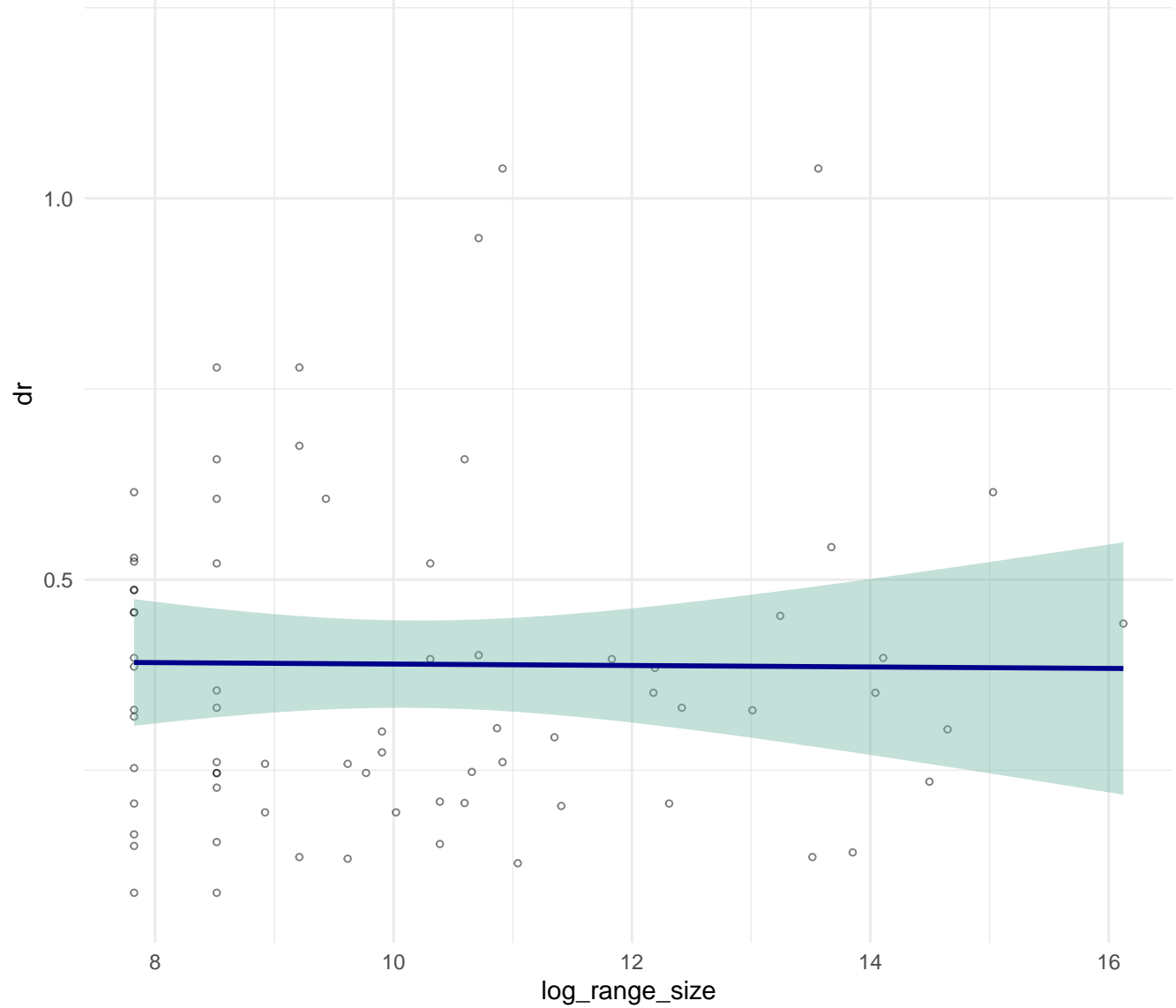
adj r2 = 0.001 p-value = 0.224



Alysseae-Huang\_et\_al-2019.tree

No. species = 73

adj r2 = -0.014 p-value = 0.942



Anarcardiaceae-Weeks\_et\_al-2014.tree

No. species = 224

adj r2 = -0.004 p-value = 0.765

dr

0.5

0.4

0.3

0.2

0.1

0.0

8

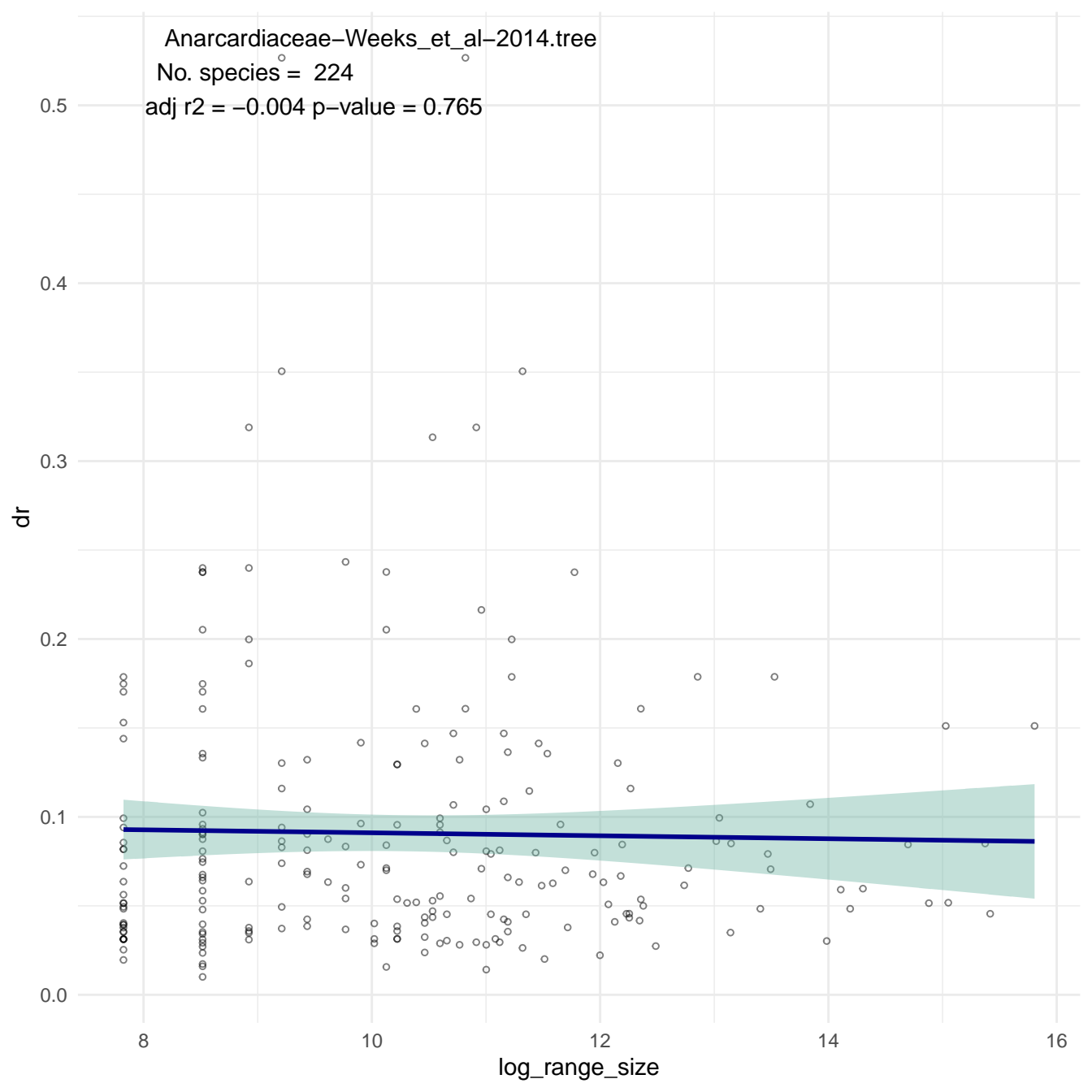
10

12

14

16

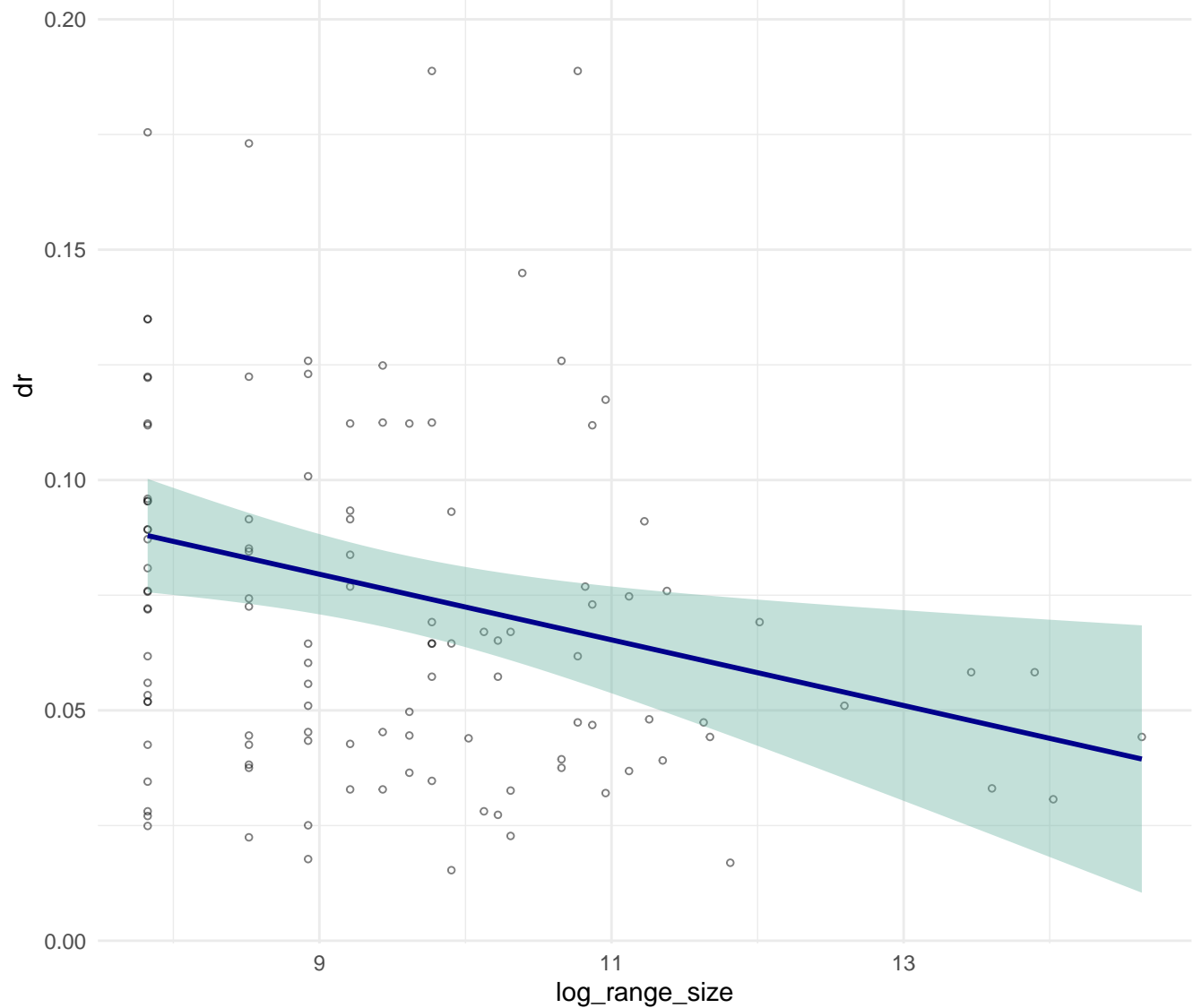
log\_range\_size



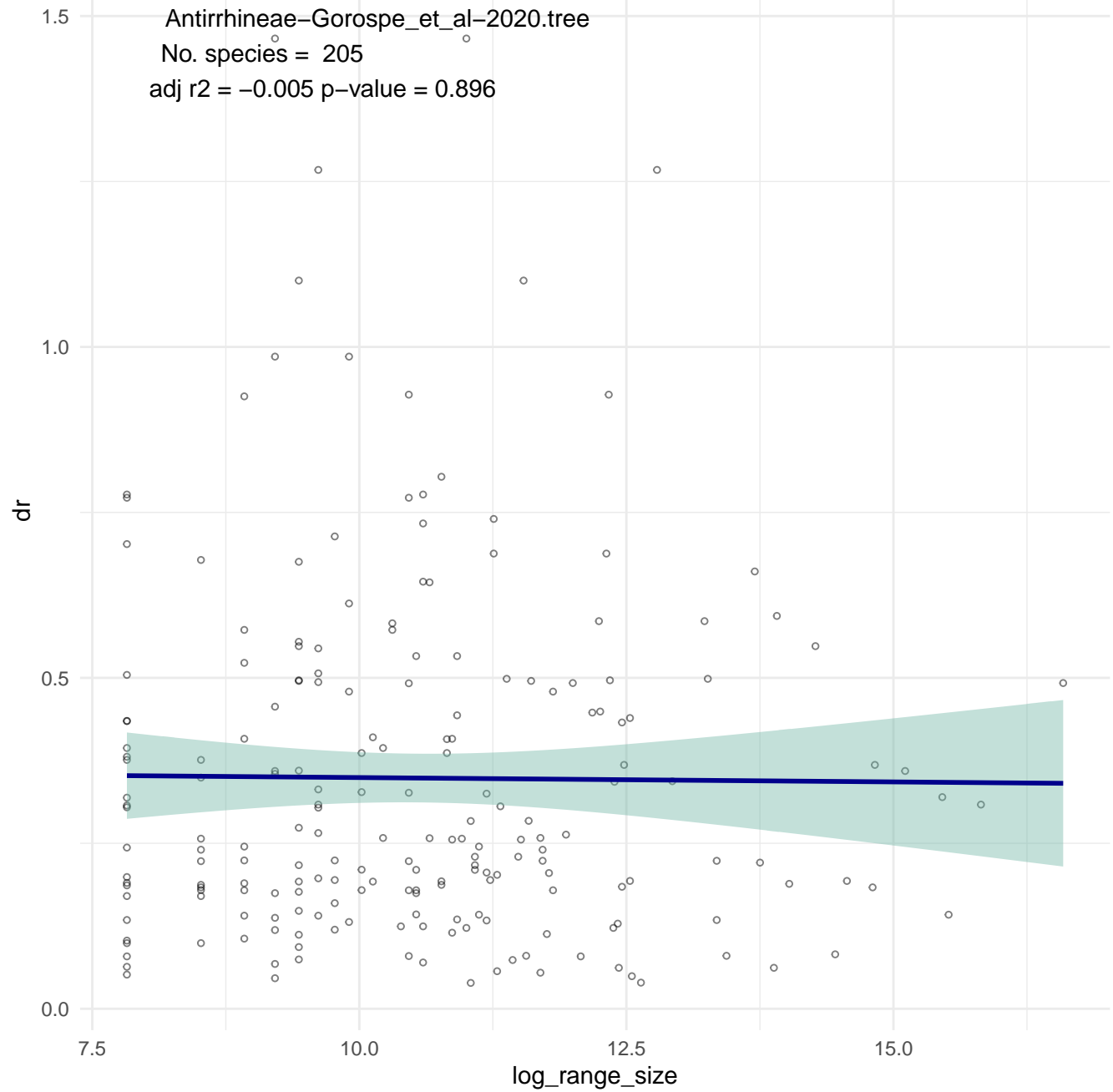
Annonaceae-Onstein\_et\_al-2019.tree

No. species = 118

adj r2 = 0.047 p-value = 0.01



Antirrhineae-Gorospe\_et\_al-2020.tree  
No. species = 205  
adj r2 = -0.005 p-value = 0.896



Apioideae-Banasiak\_et\_al-2013.tree

No. species = 644

adj r2 = 0.014 p-value = 0.002

dr

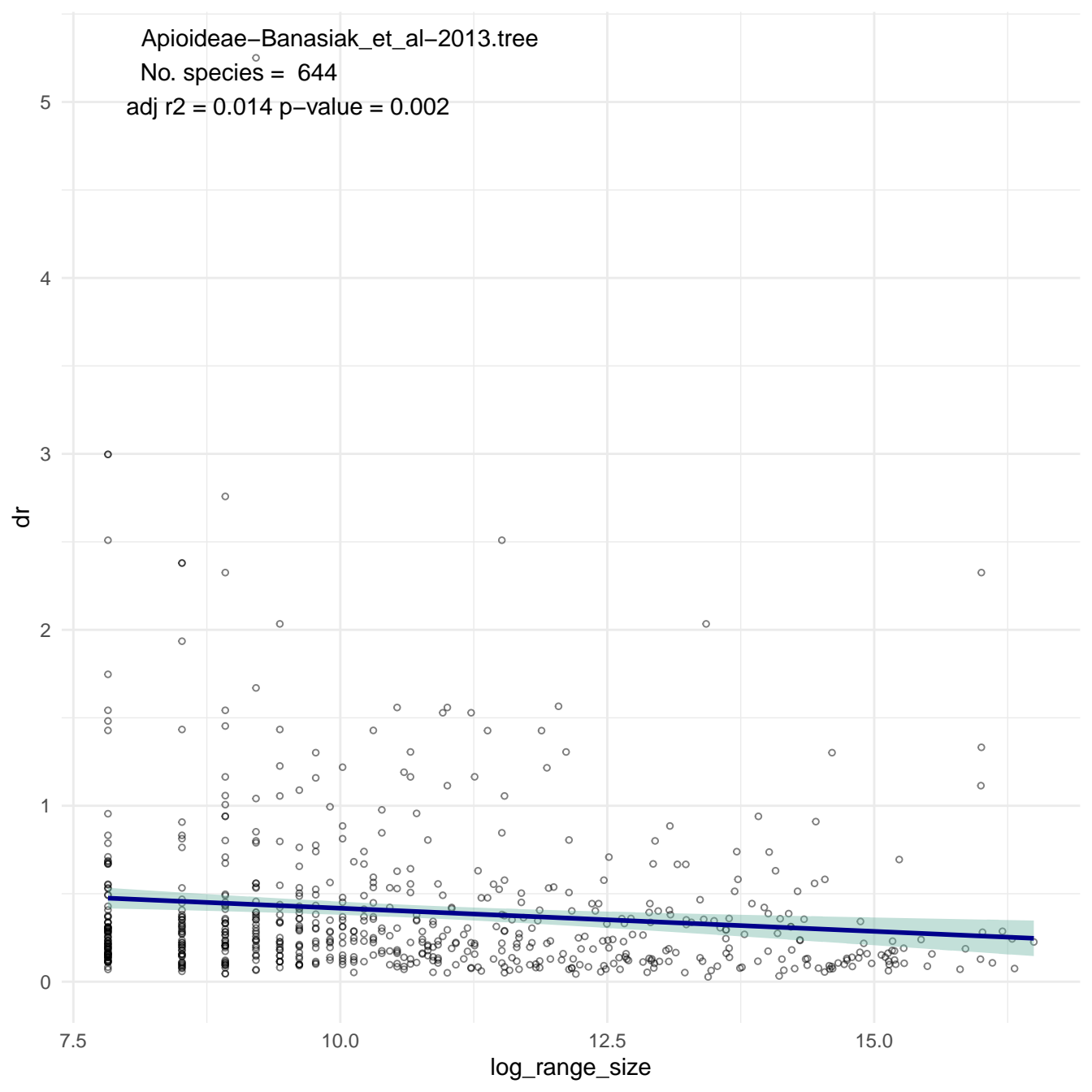
7.5

10.0

12.5

15.0

log\_range\_size



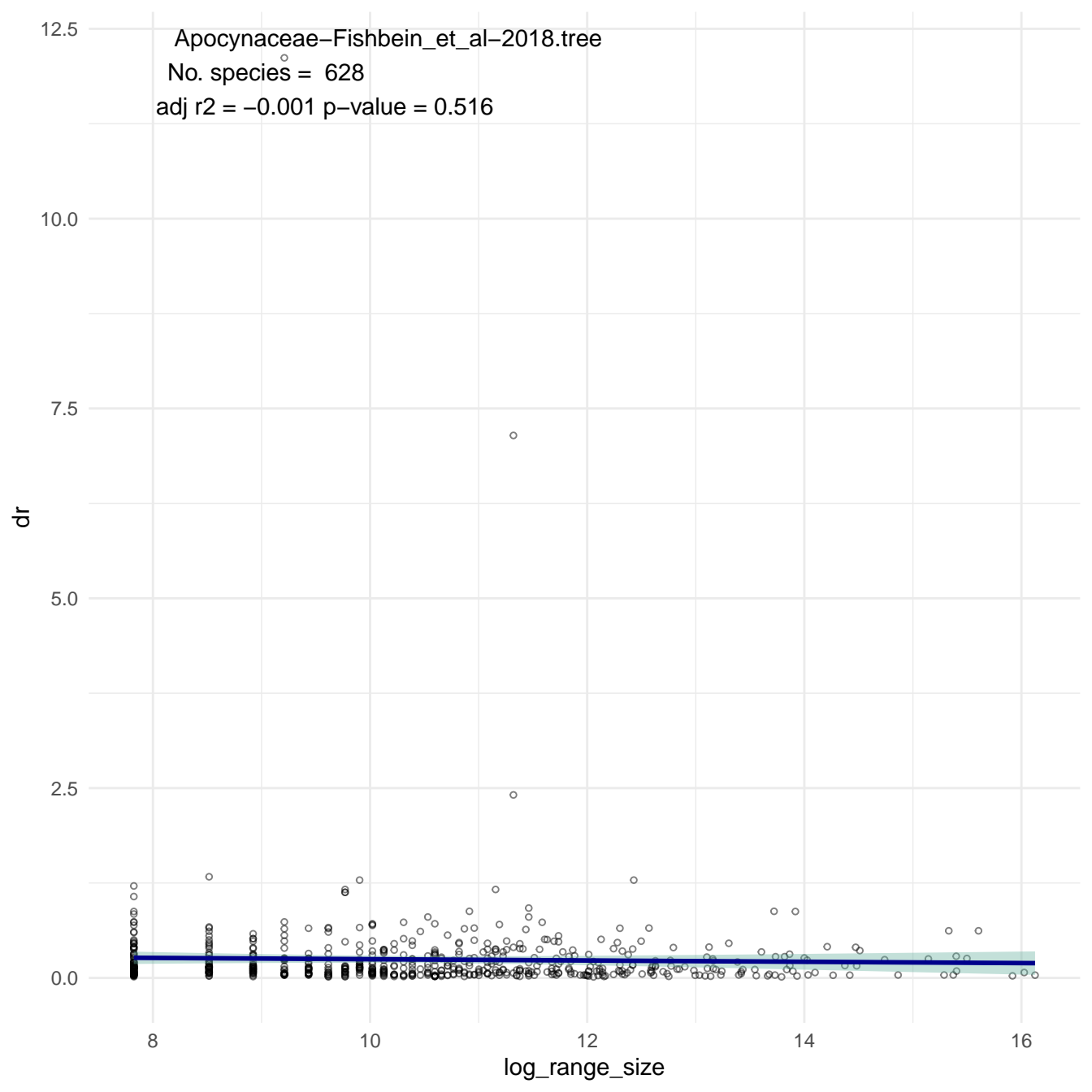
Apocynaceae–Fishbein\_et\_al–2018.tree

No. species = 628

adj r2 = -0.001 p-value = 0.516

dr

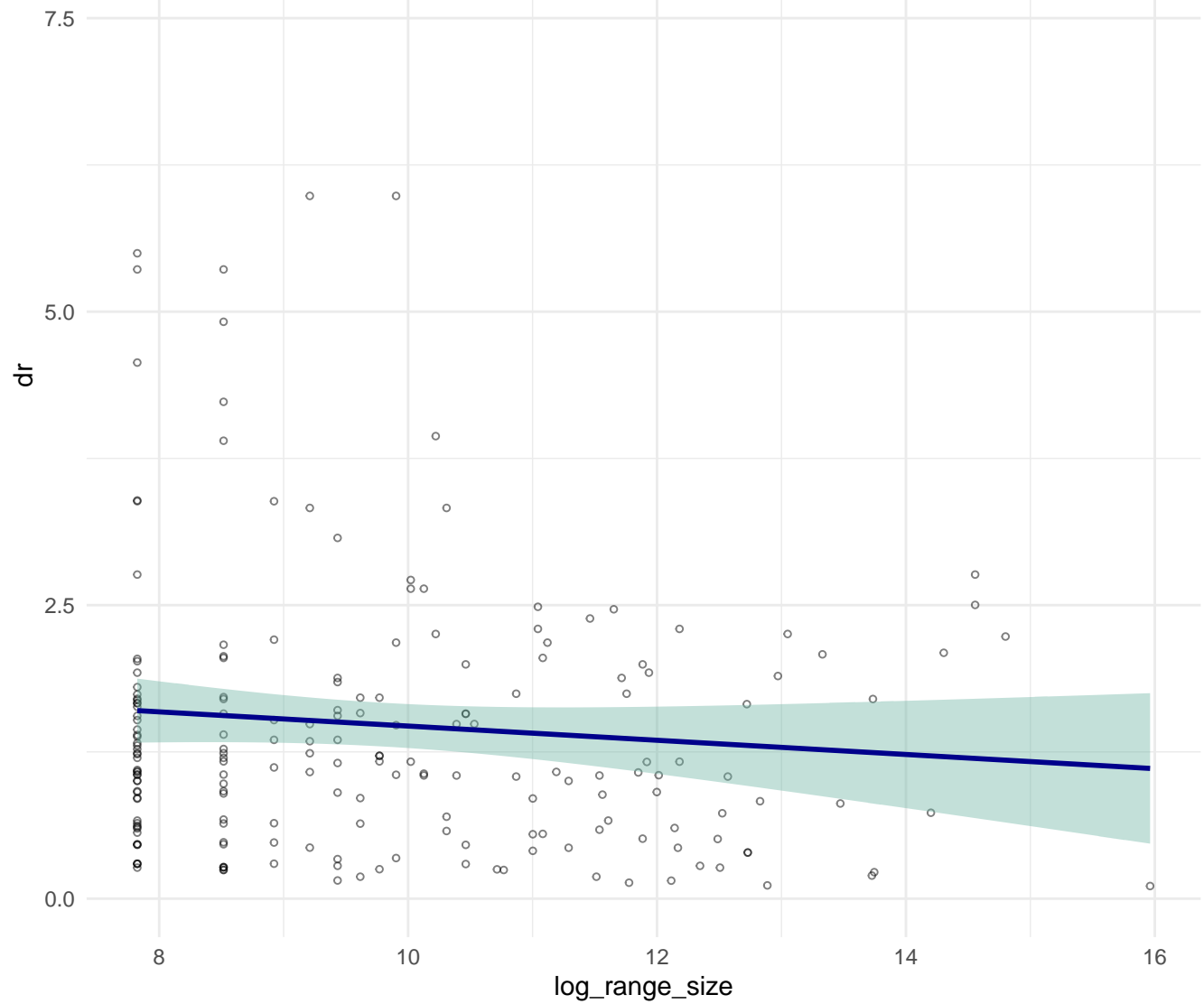
log\_range\_size



Arabideae-Huang\_et\_al-2019.tree

No. species = 201

adj r<sup>2</sup> = 0.002 p-value = 0.233





Araceae-Nauheimer\_et\_al-2012.tree

No. species = 84

adj r2 = -0.009 p-value = 0.628

dr

0.100

0.075

0.050

0.025

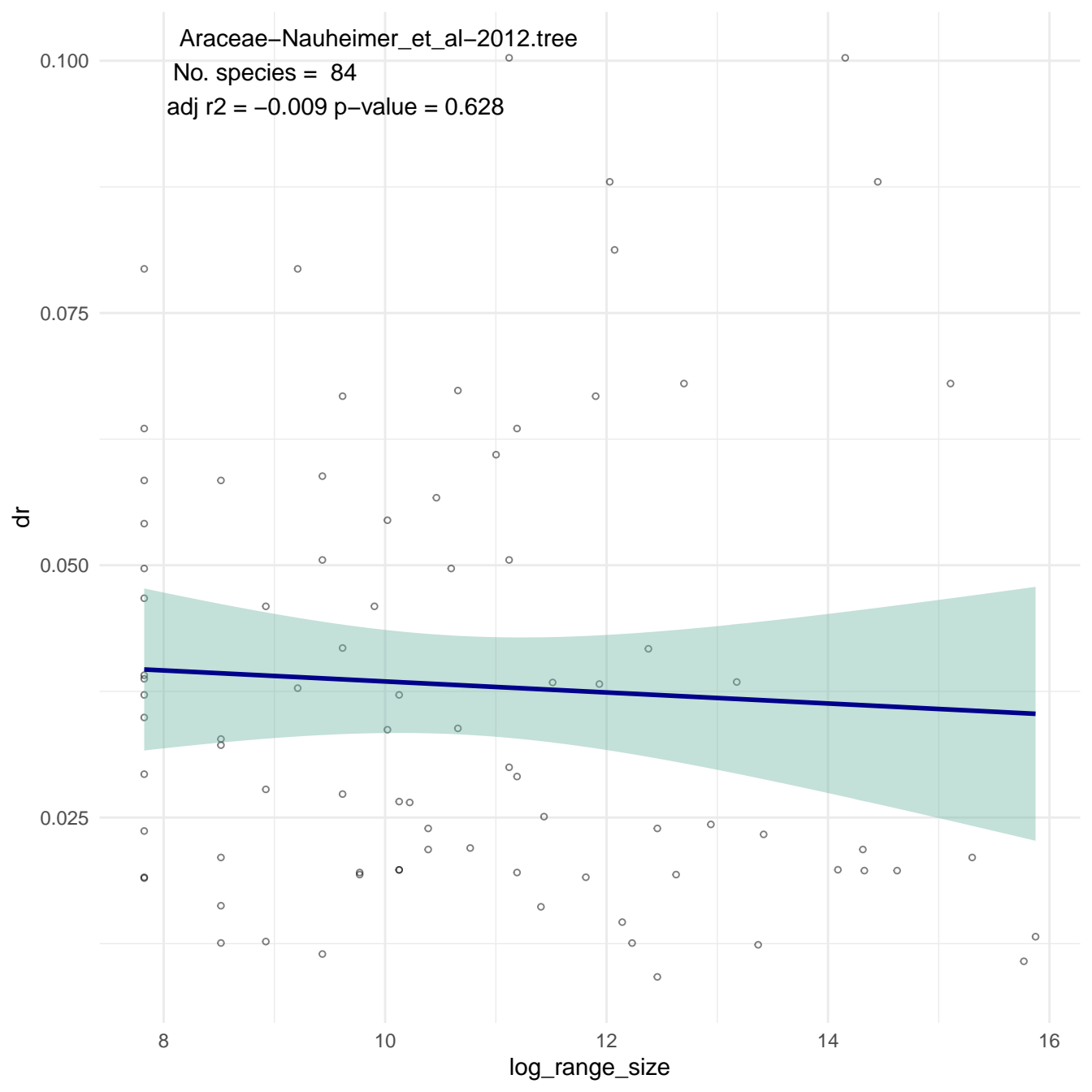
8

log\_range\_size

12

14

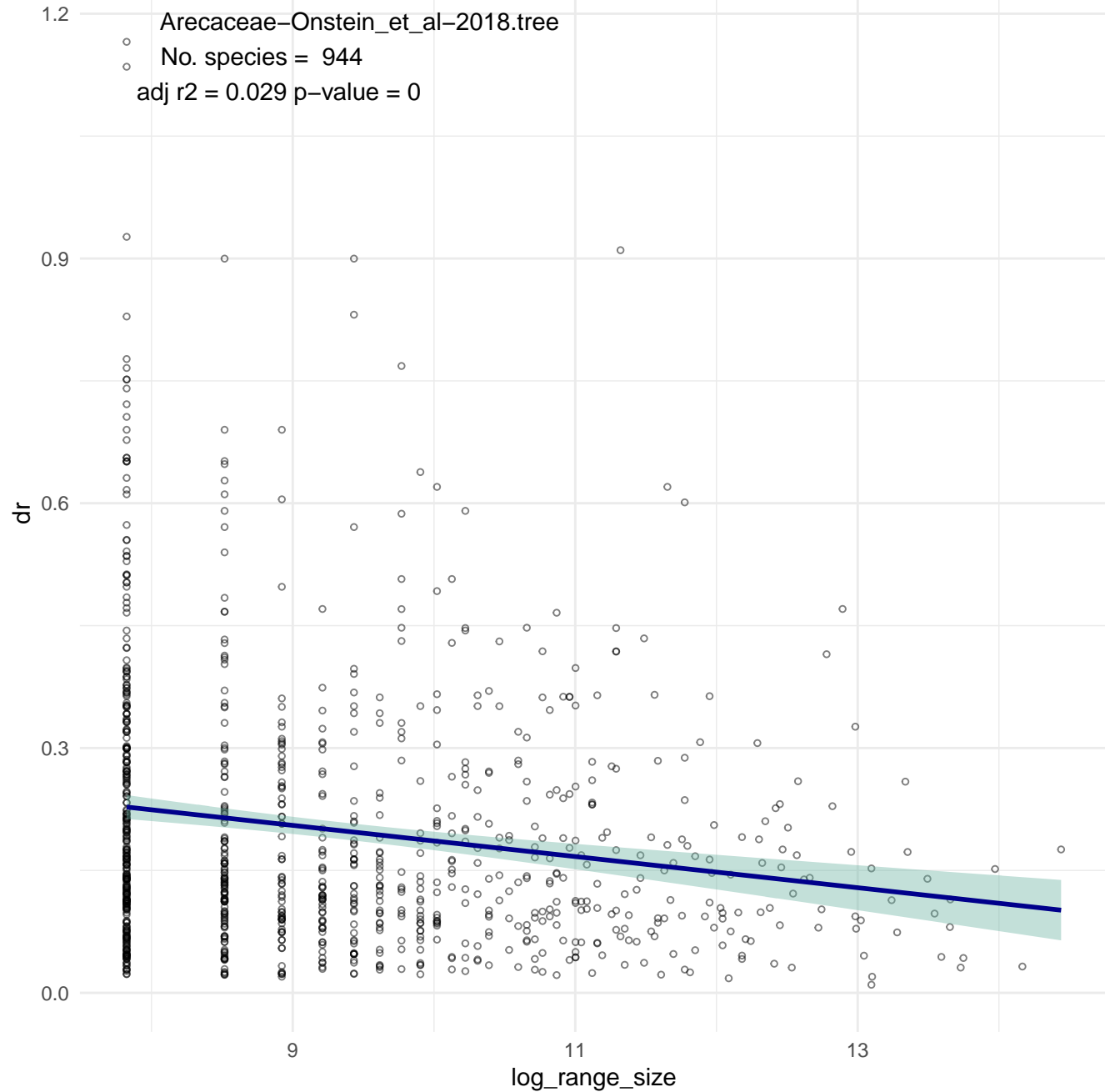
16



Arecaceae-Onstein\_et\_al-2018.tree

No. species = 944

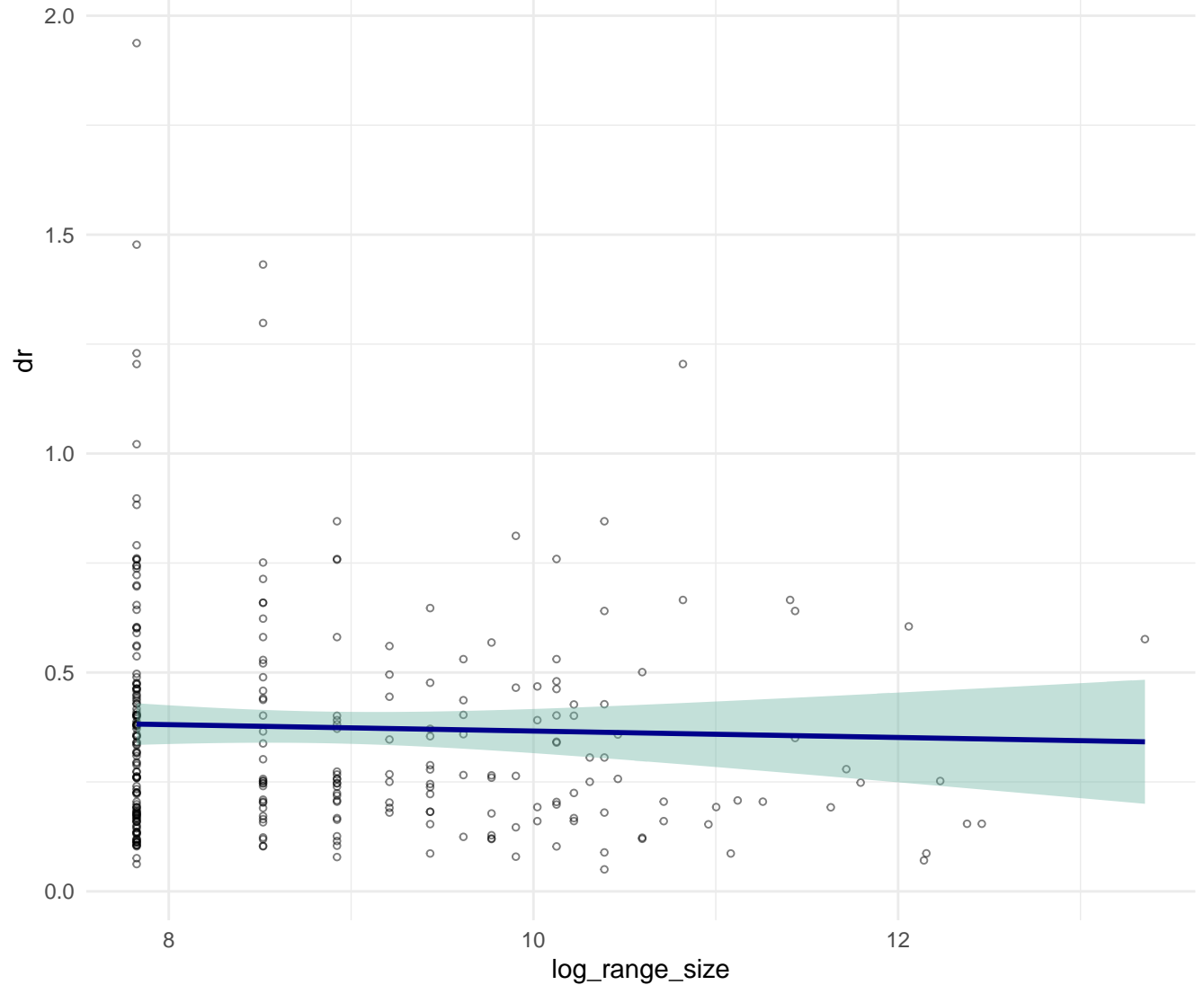
adj r2 = 0.029 p-value = 0



Begonia-Moonlight\_et\_al-2015.tree

No. species = 283

adj r2 = -0.003 p-value = 0.636



Bignoniaceae-Lohmann\_et\_al-2012.tree

○ No. species = 75

adj r2 = 0.024 p-value = 0.097

dr

0.09

0.06

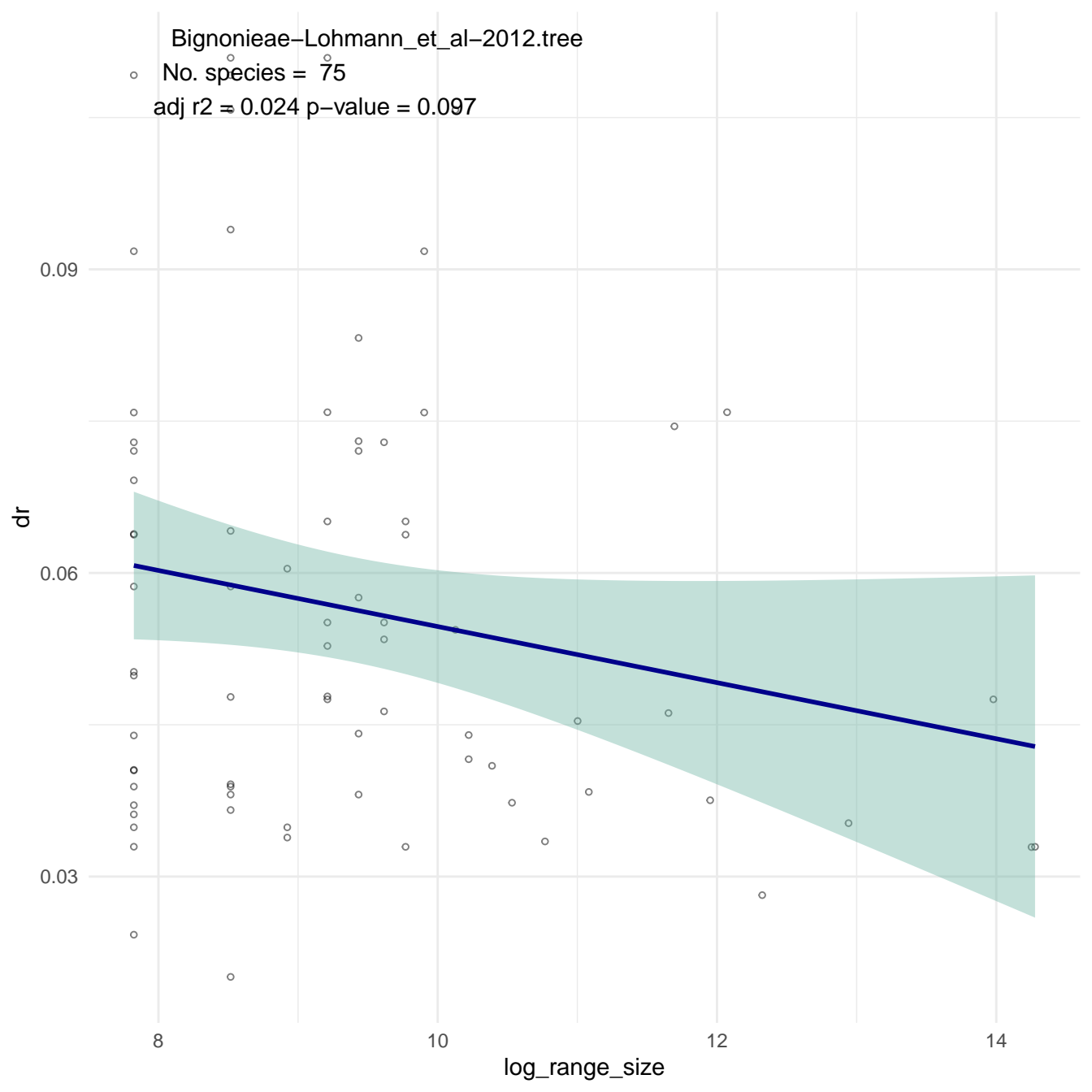
0.03

8

log\_range\_size

12

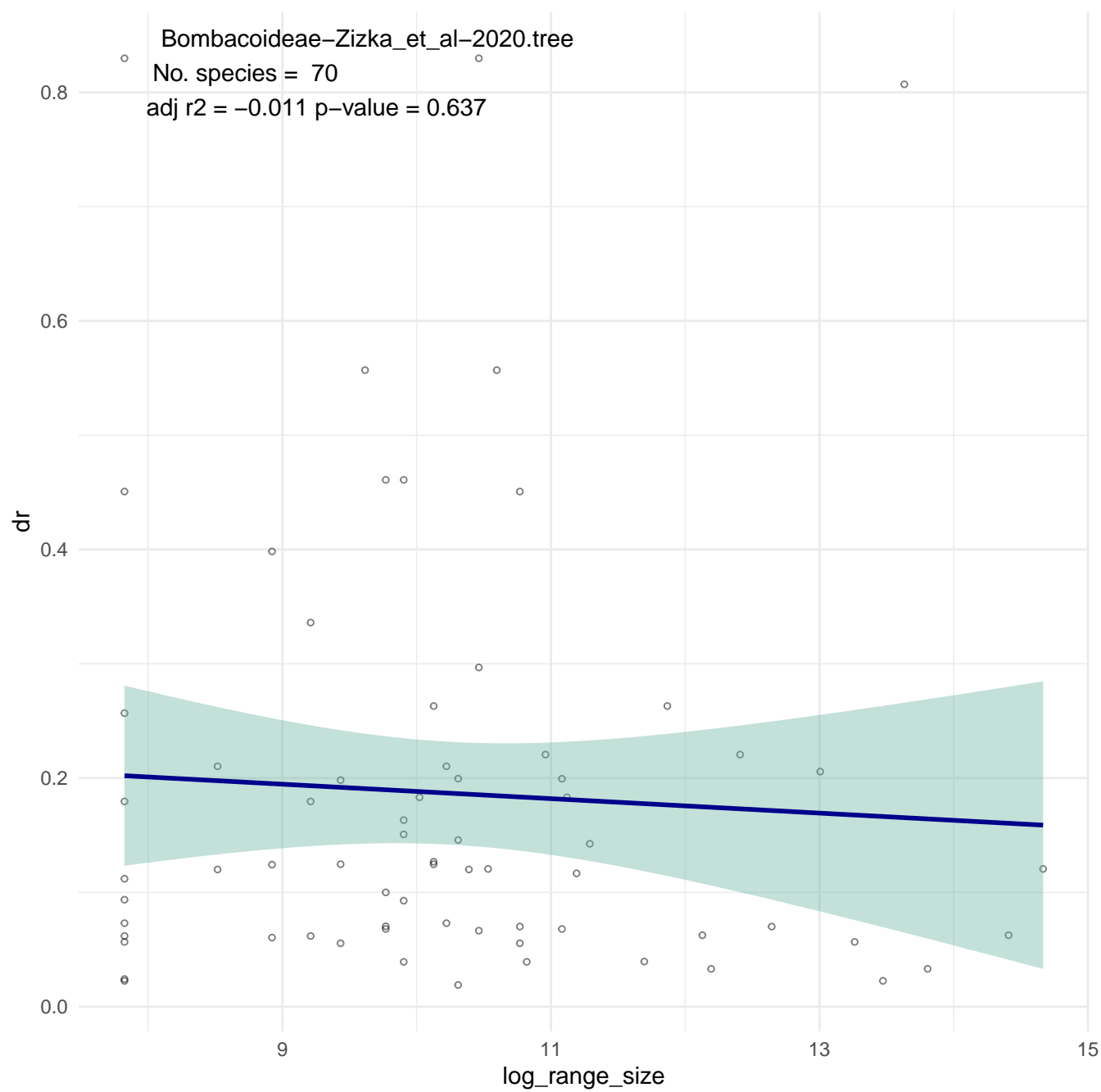
14



Bombacoideae-Zizka\_et\_al-2020.tree

No. species = 70

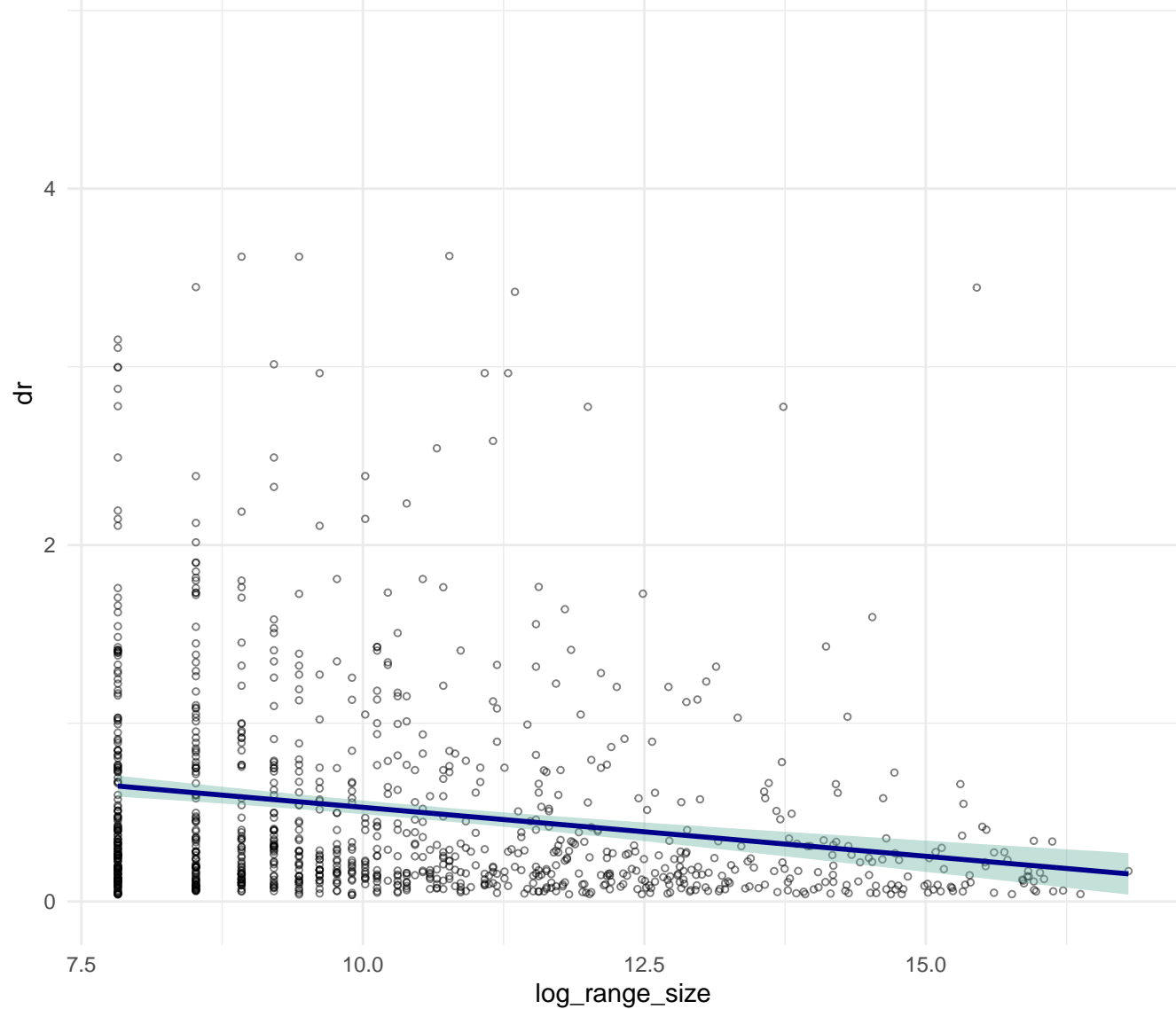
adj r2 = -0.011 p-value = 0.637



Brassicaceae-Smith\_&\_Brown-2018.tree

No. species = 994

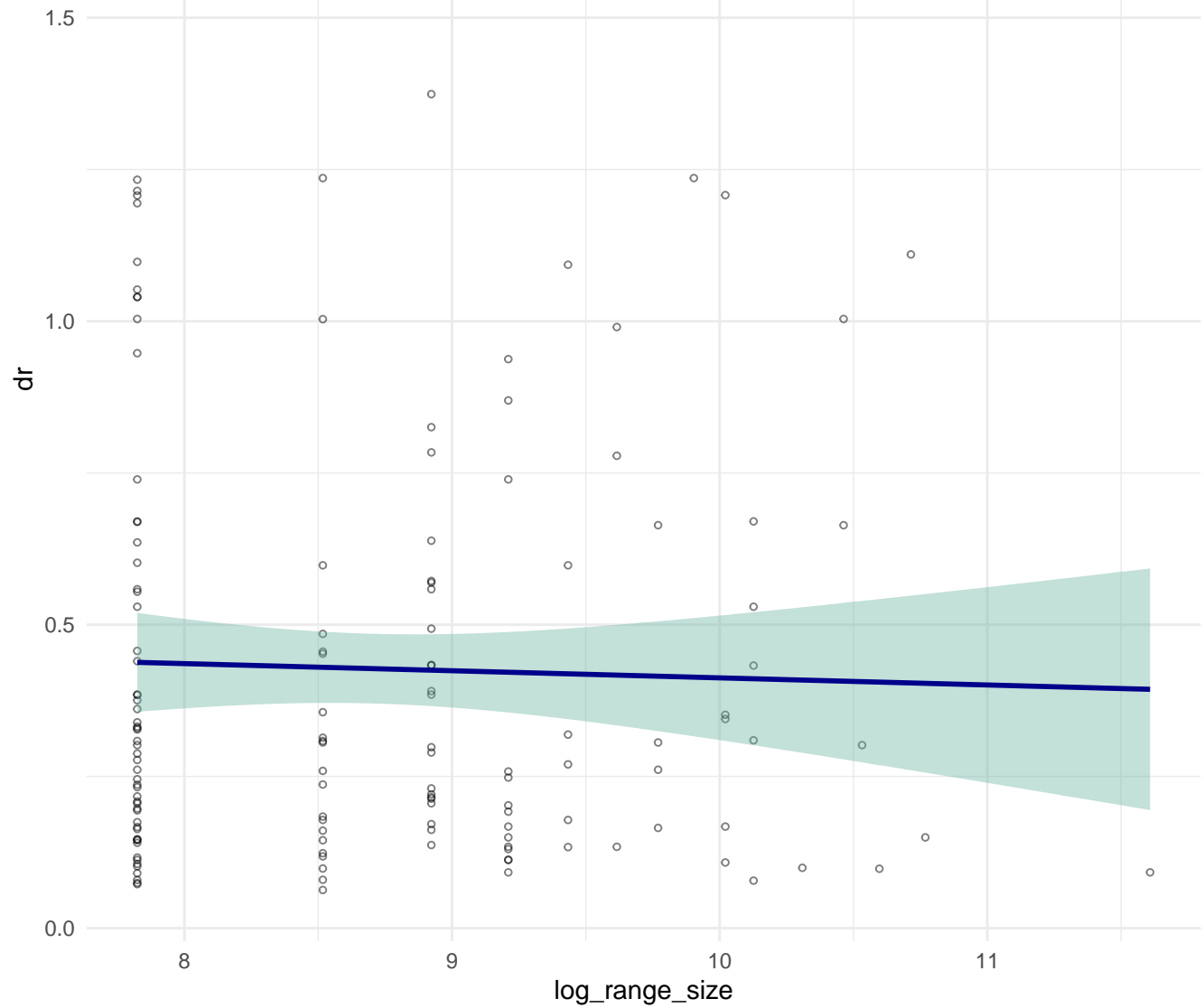
adj r2 = 0.037 p-value = 0



Bulbophyllum-Gamisch\_&\_Comes-2019.tree

No. species = 147

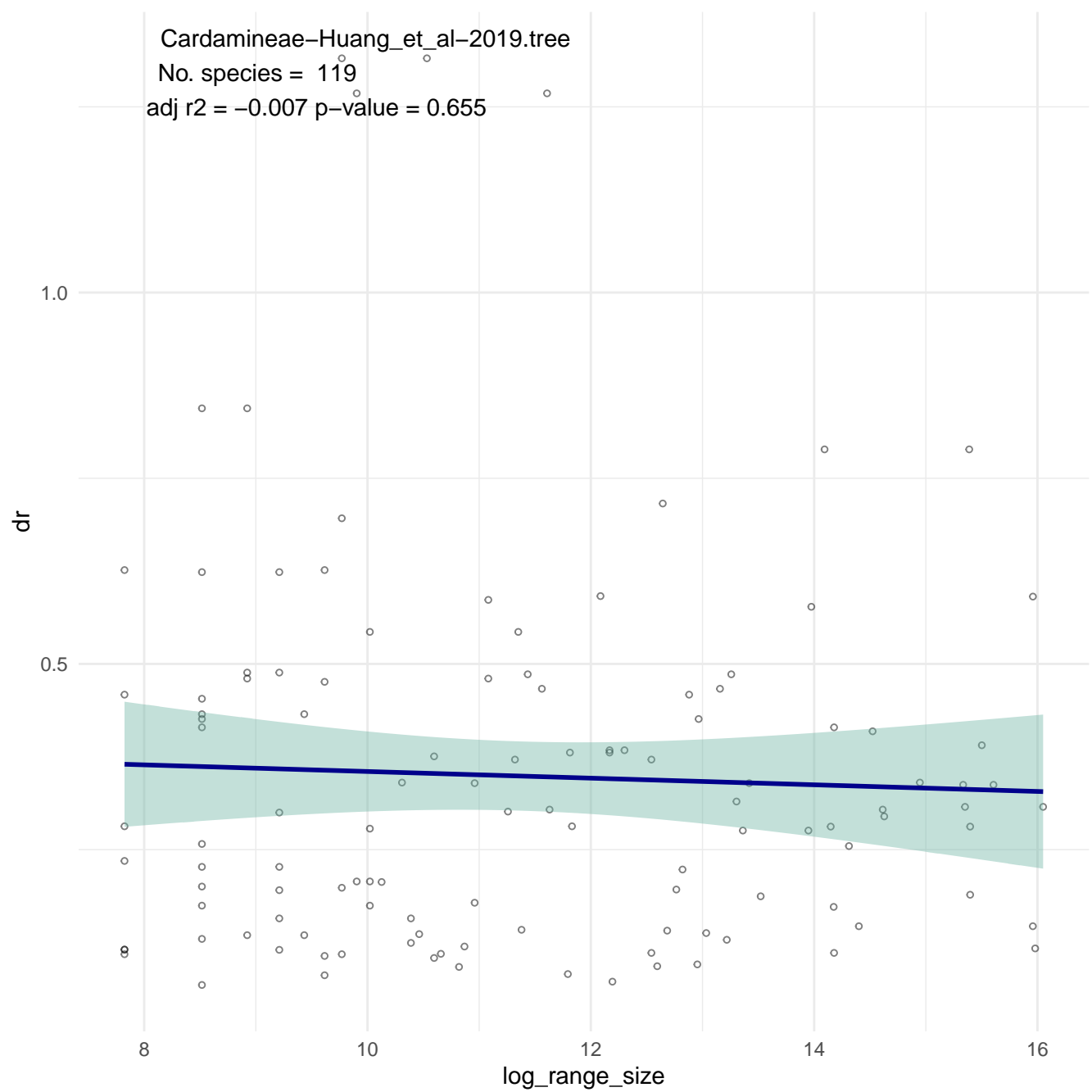
adj r2 = -0.006 p-value = 0.724



Cardamineae-Huang\_et\_al-2019.tree

No. species = 119

adj r2 = -0.007 p-value = 0.655

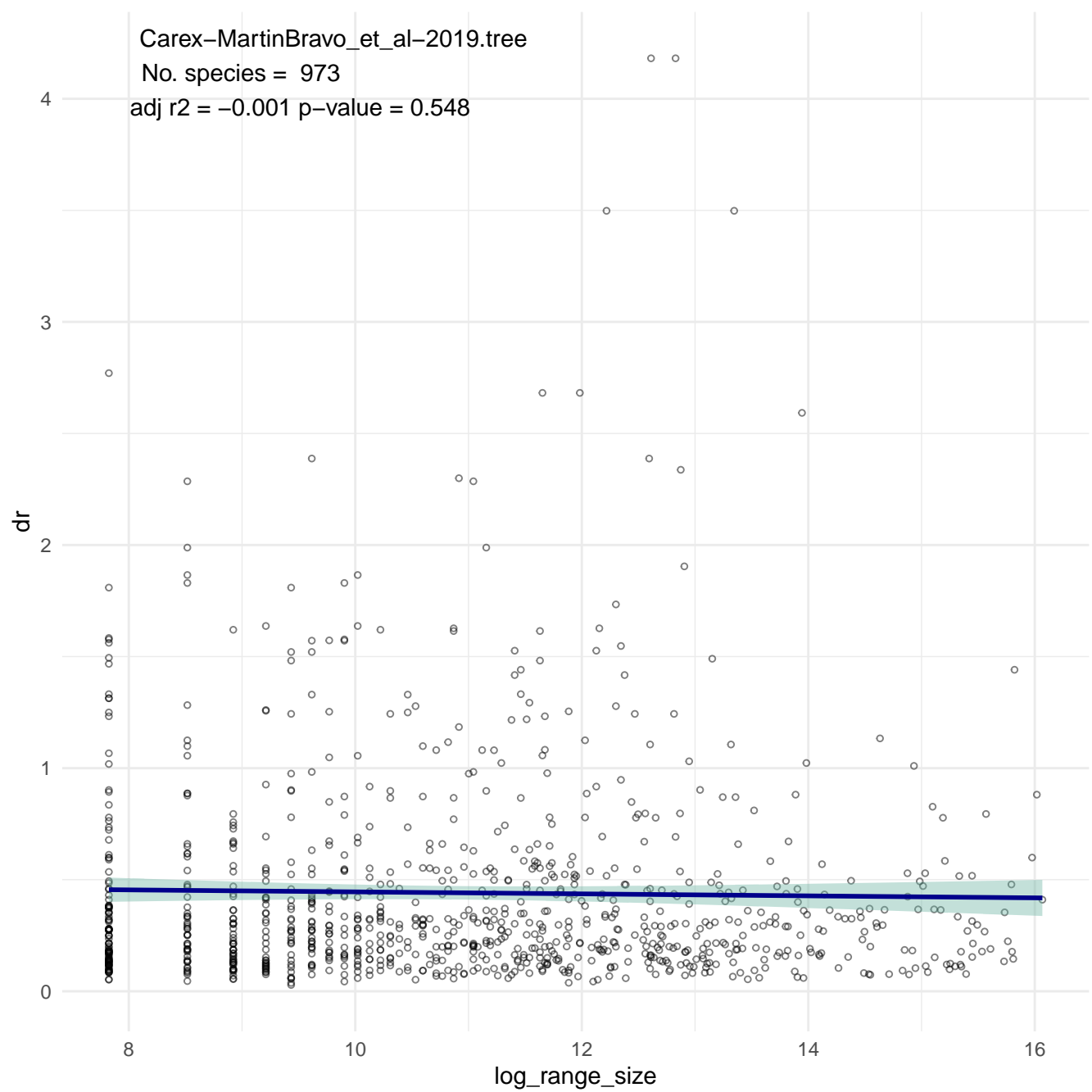




Carex–MartinBravo\_et\_al–2019.tree

No. species = 973

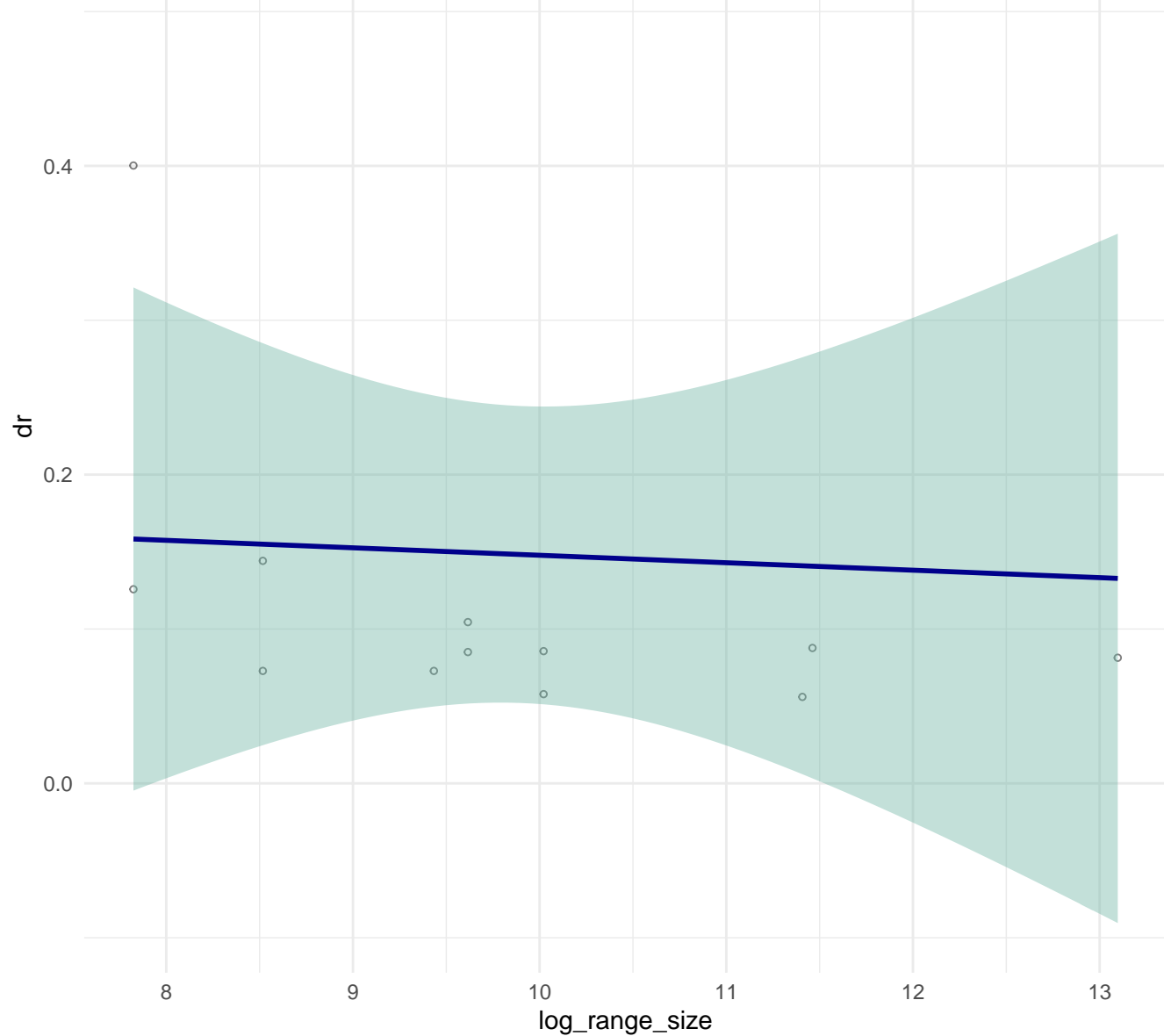
adj r2 = -0.001 p-value = 0.548



Chamaecrista-Vasconcelos\_et\_al-2020.tree

No. species = 13

adj r2 = -0.088 p-value = 0.869



Chrysobalanaceae-Chave\_et\_al-2020.tree

No. species = 113

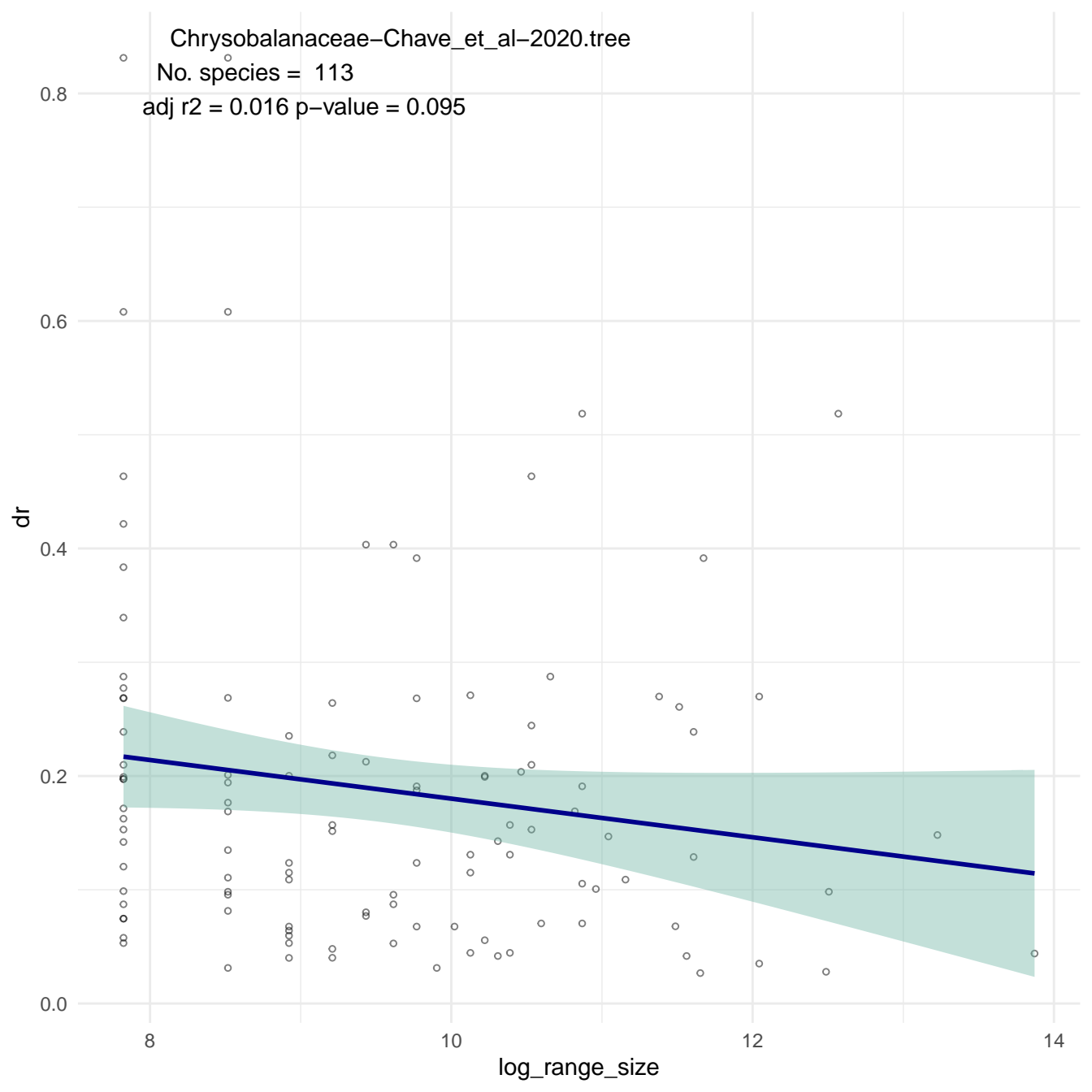
adj r2 = 0.016 p-value = 0.095

dr

0.8  
0.6  
0.4  
0.2  
0.0

log\_range\_size

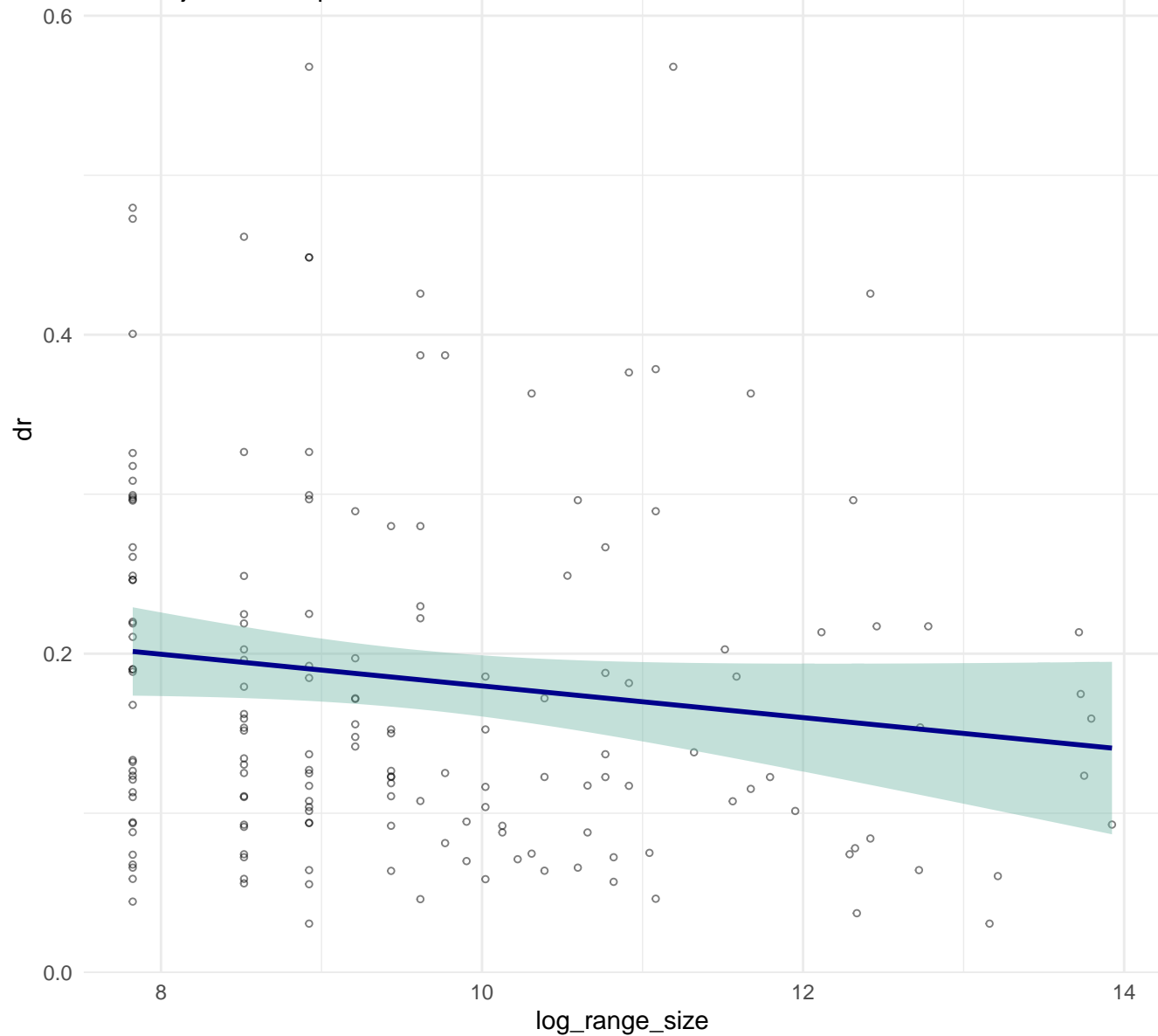
8 10 12 14



Croton-Arevalo\_et\_al-2017.tree

No. species = 170

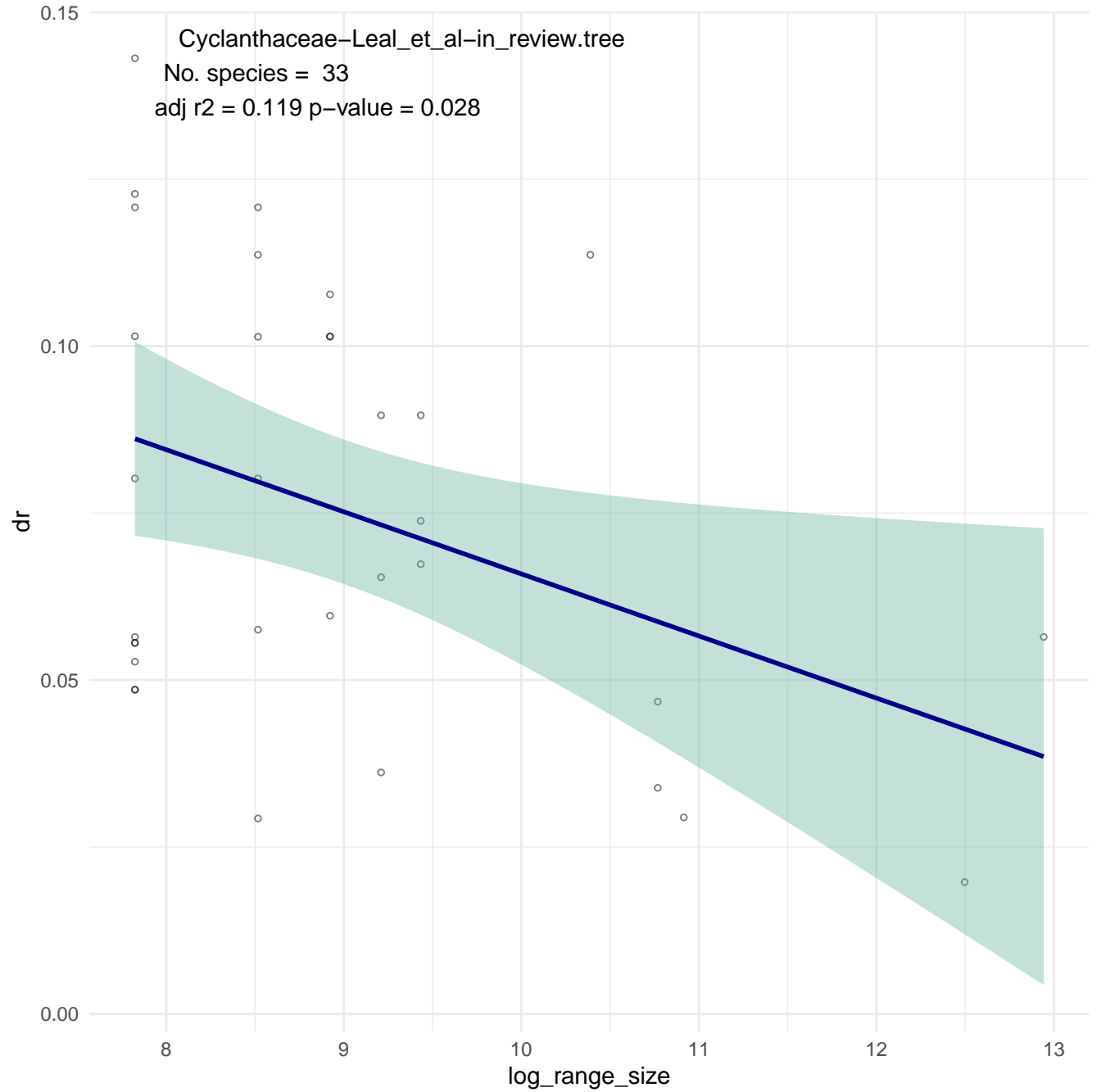
adj r2 = 0.011 p-value = 0.096



Cyclanthaceae-Leal\_et\_al-in\_review.tree

No. species = 33

adj r2 = 0.119 p-value = 0.028

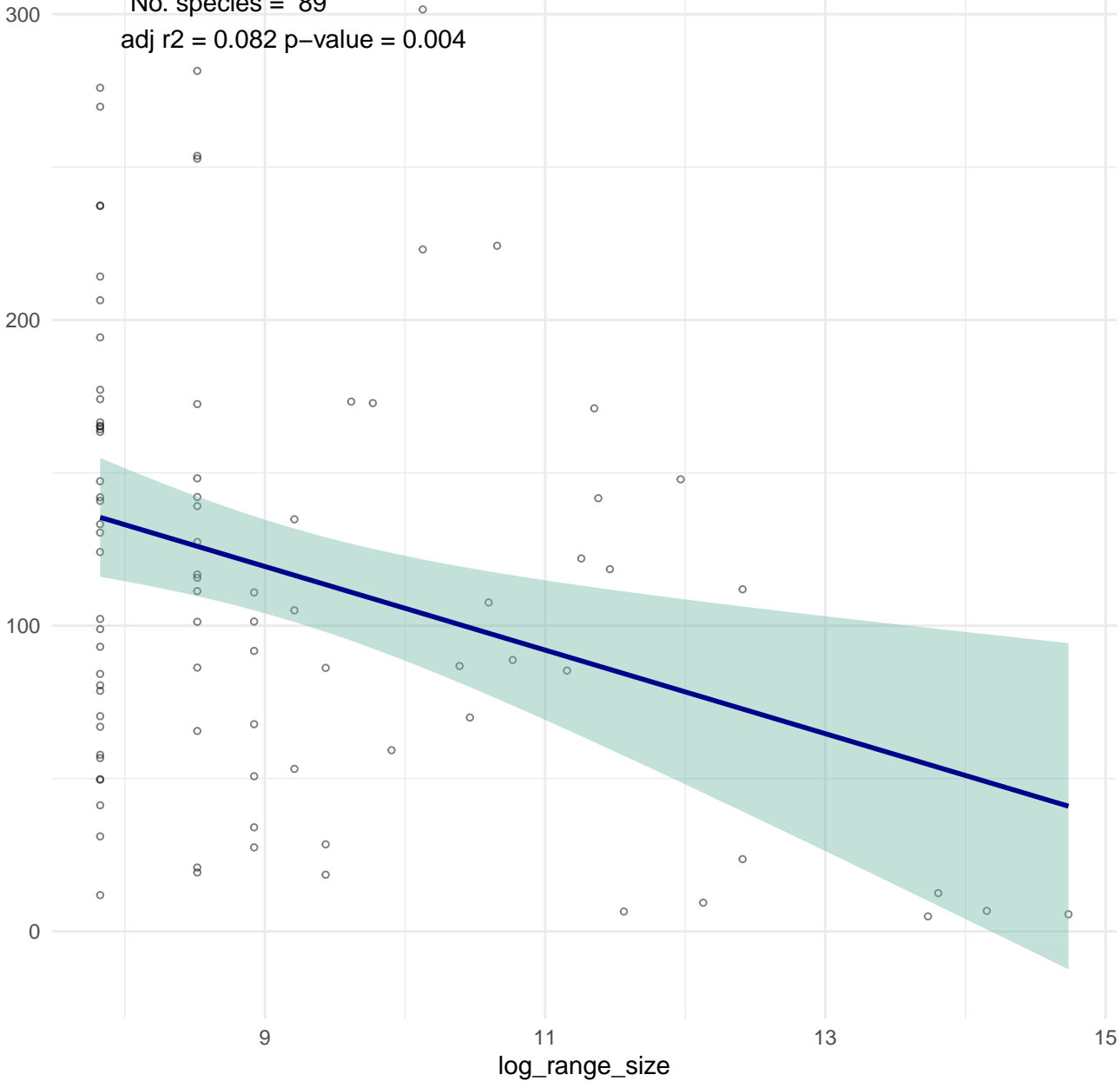


Dipterocarpaceae-Bansal\_et\_al-2022.tree

No. species = 89

adj r2 = 0.082 p-value = 0.004

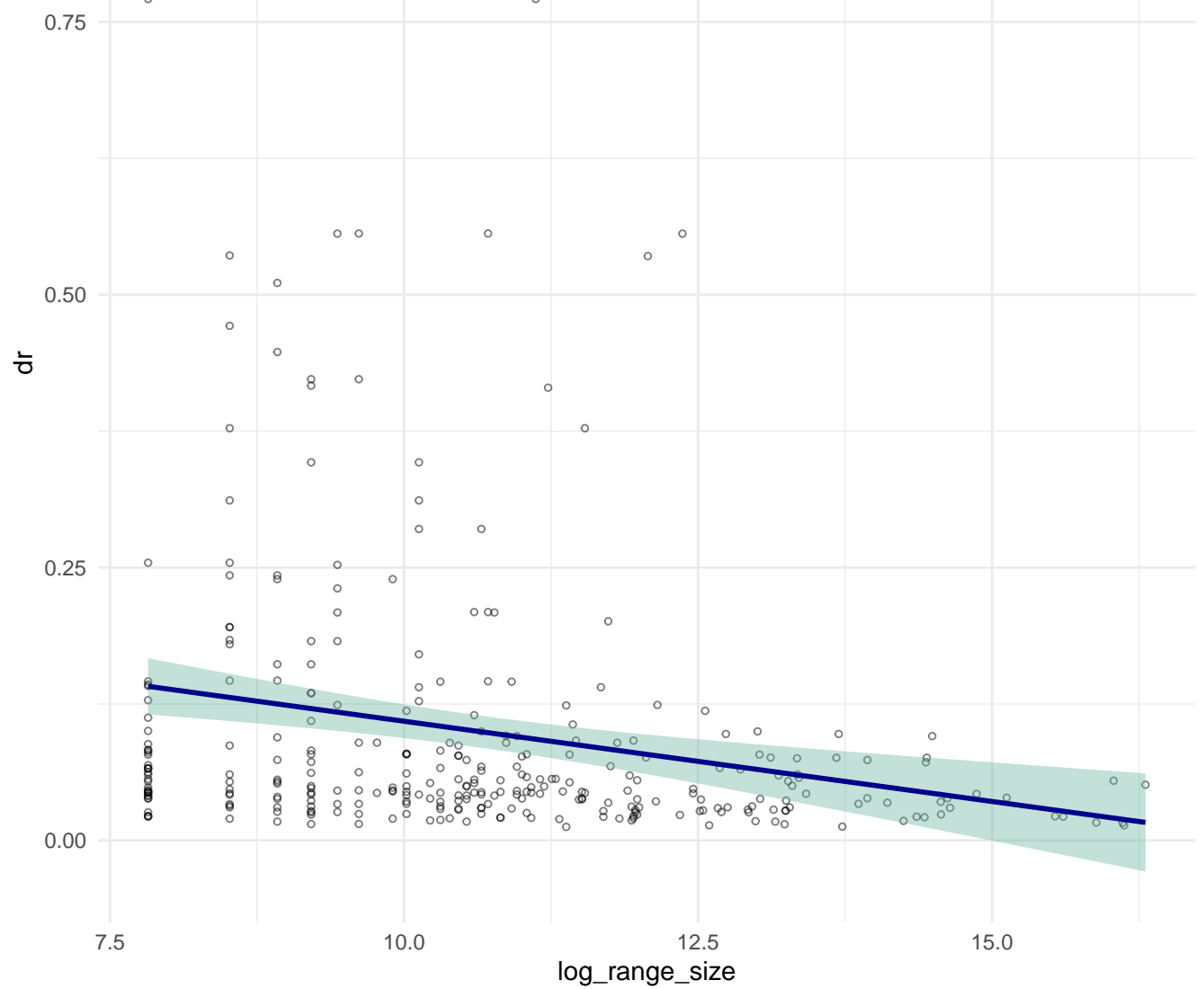
dr



Ericaceae-Schwery\_et\_al-2015.tree

No. species = 316

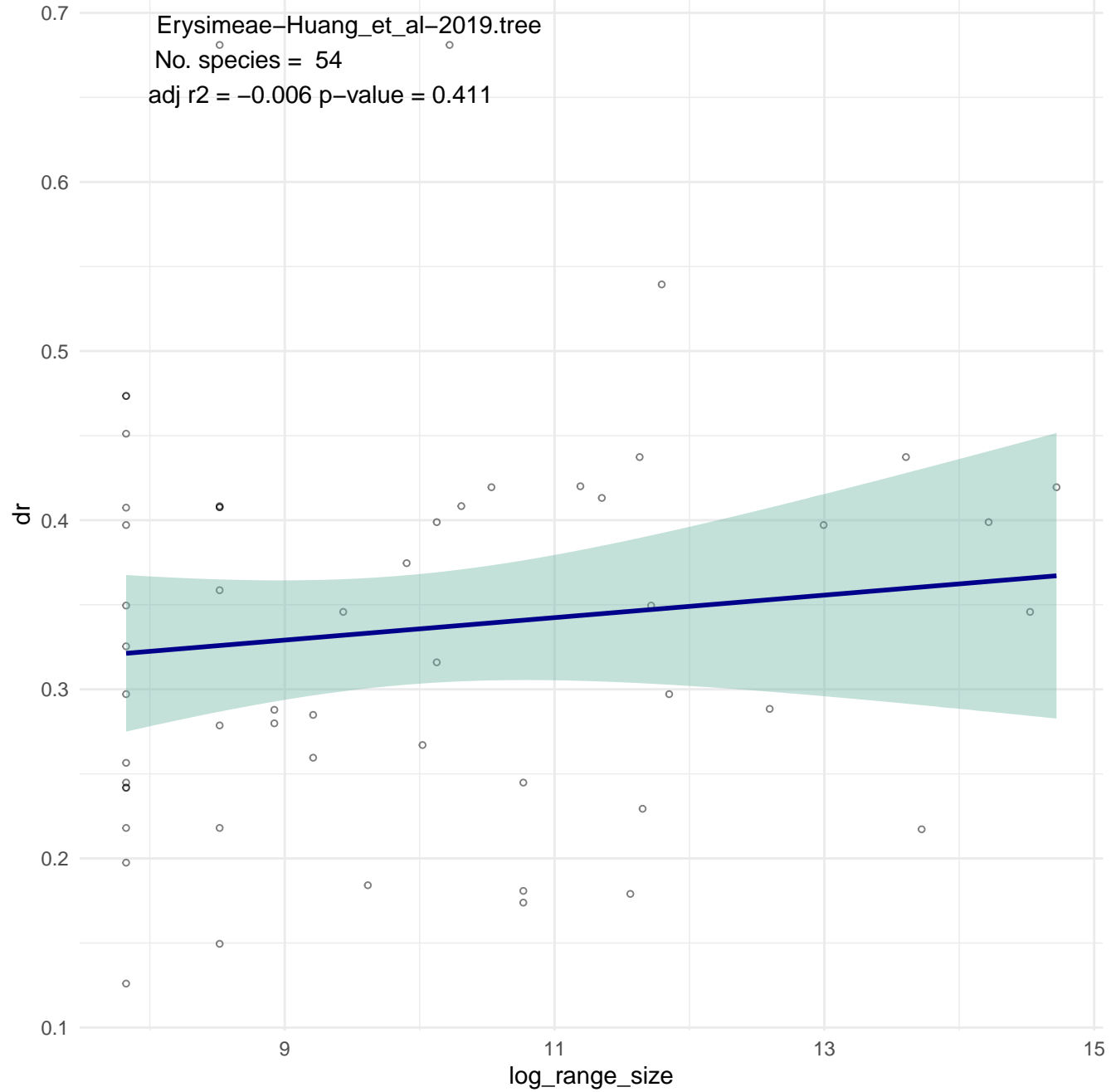
adj r2 = 0.042 p-value = 0



Erysimeae-Huang\_et\_al-2019.tree

No. species = 54

adj r2 = -0.006 p-value = 0.411





Eucalypts-Thornhill\_et\_al-2019.tree

No. species = 661

adj r2 = -0.001 p-value = 0.843

dr

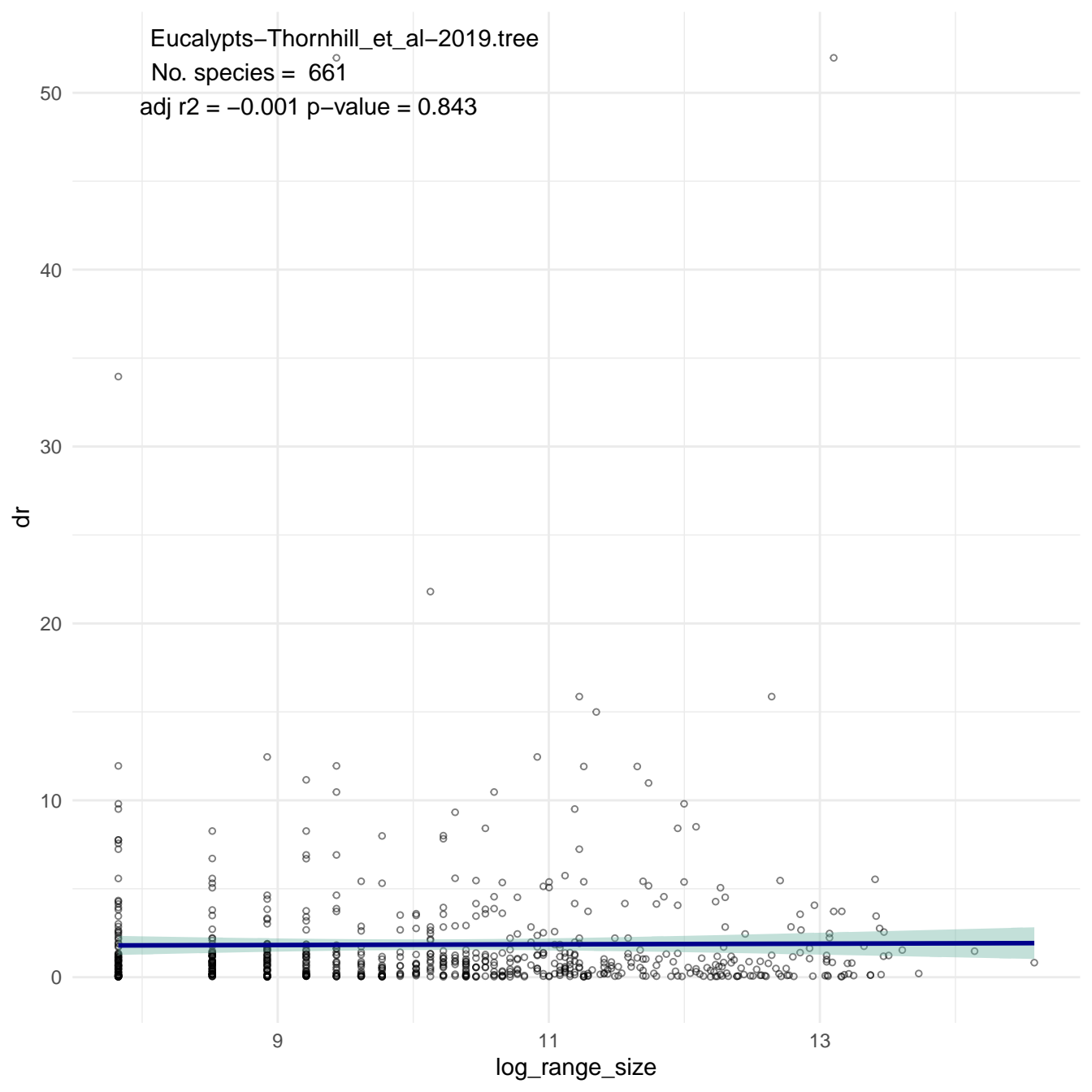
50  
40  
30  
20  
10  
0

9

11

13

log\_range\_size



FabalesRosalesFagalesCucurbitales–Kates\_et\_al–2024.tree

No. species = 15923

adj r2 = 0.002 p-value = 0

dr

100

50

0

log\_range\_size

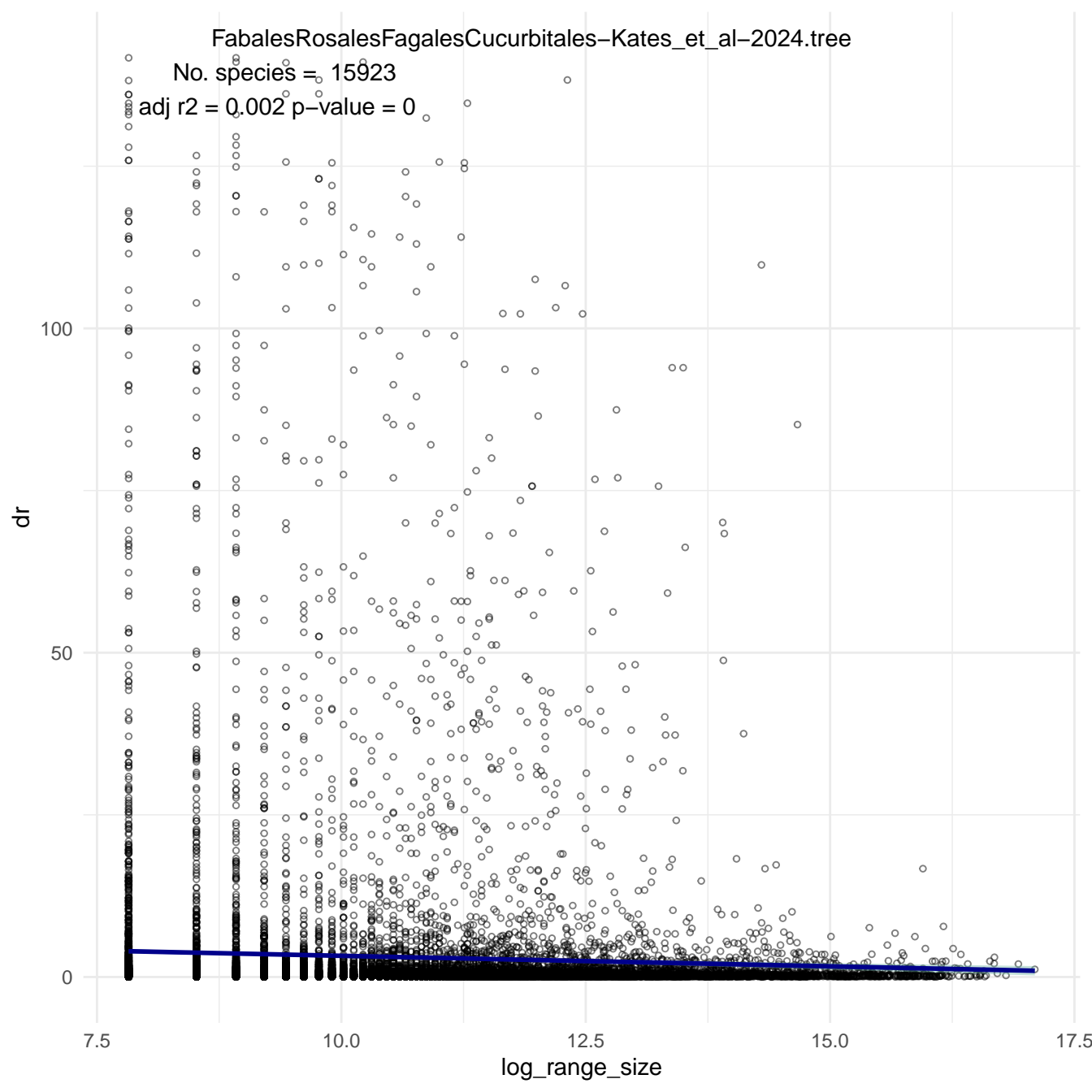
7.5

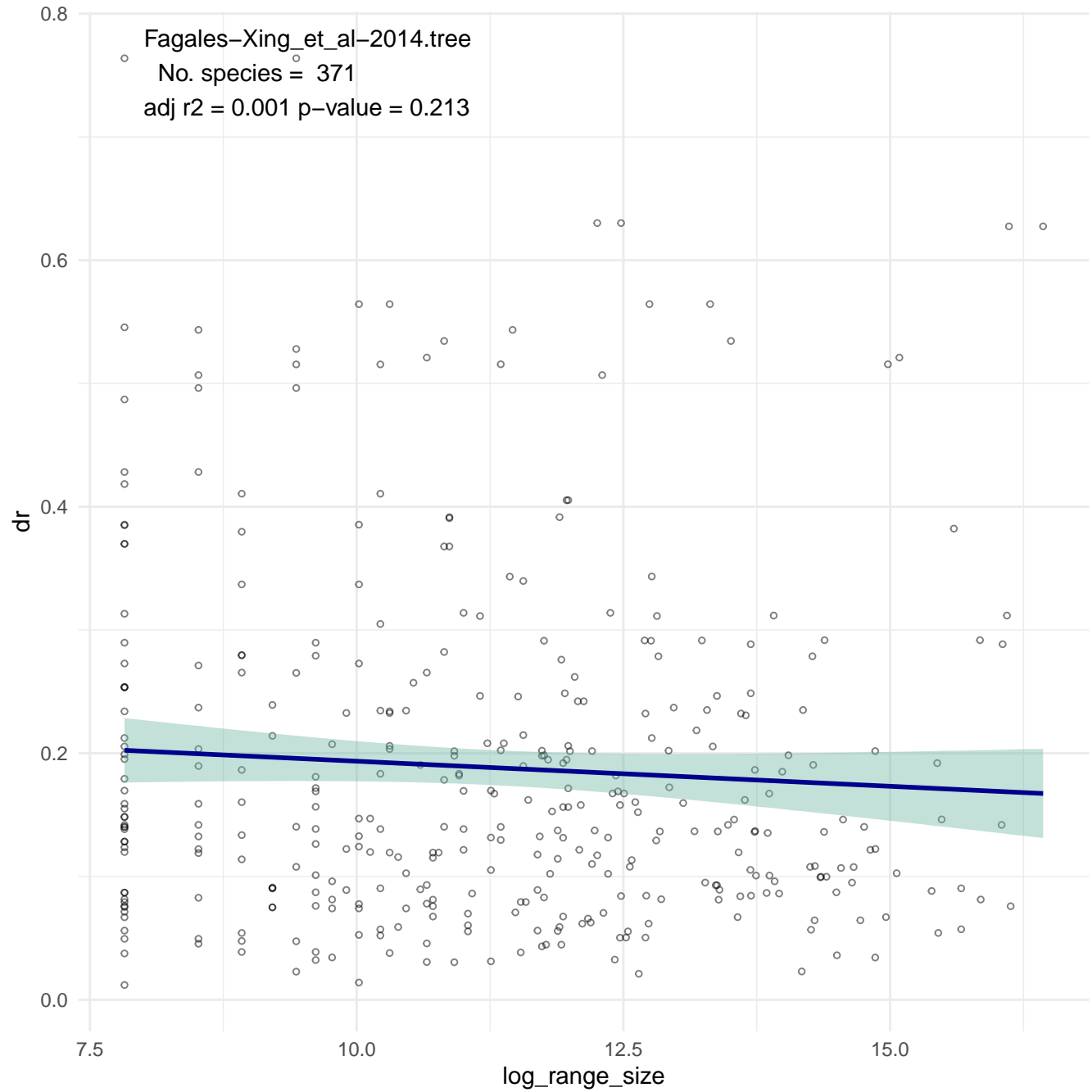
10.0

12.5

15.0

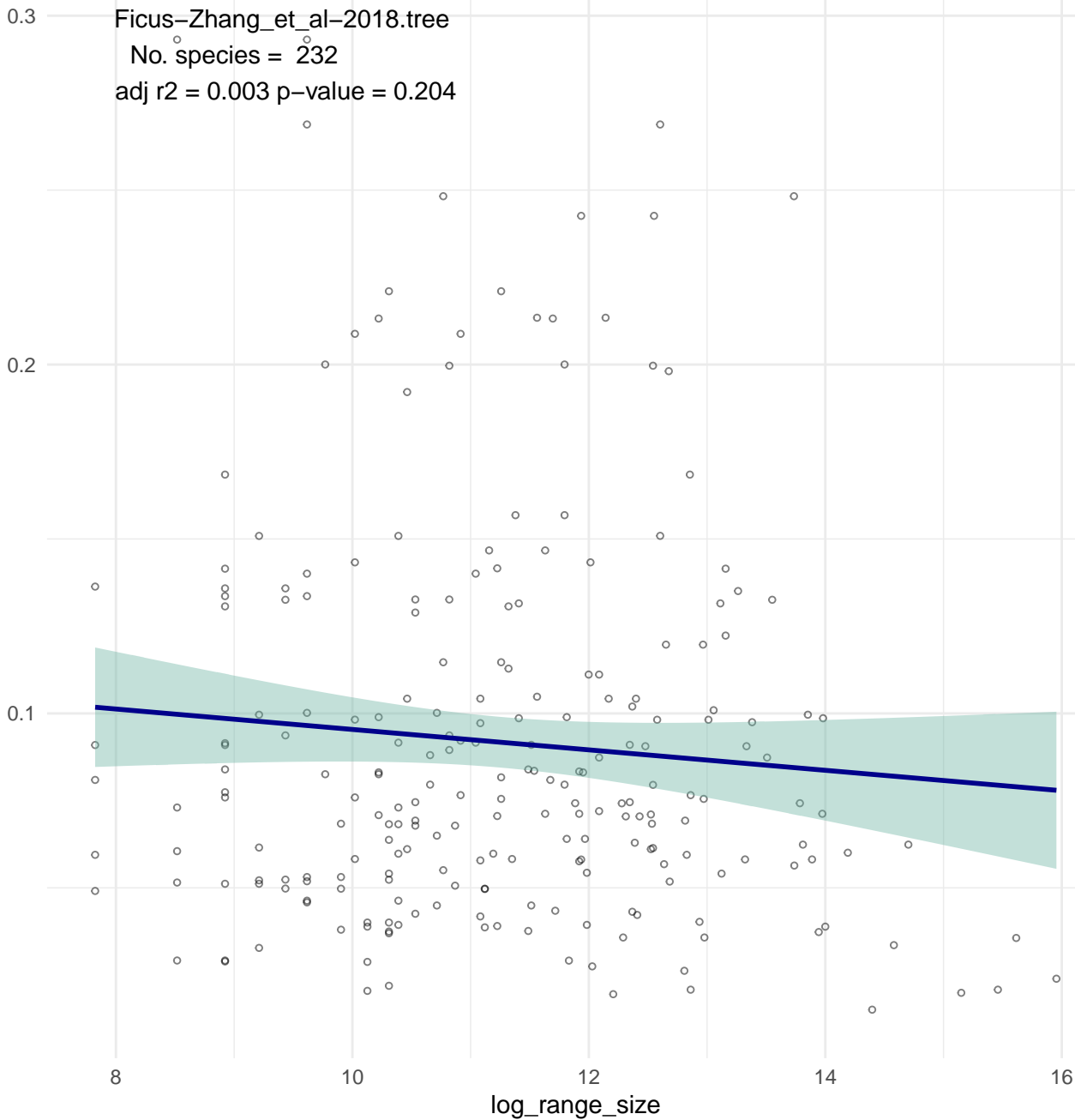
17.5





Ficus-Zhang\_et\_al-2018.tree  
No. species = 232  
adj r2 = 0.003 p-value = 0.204

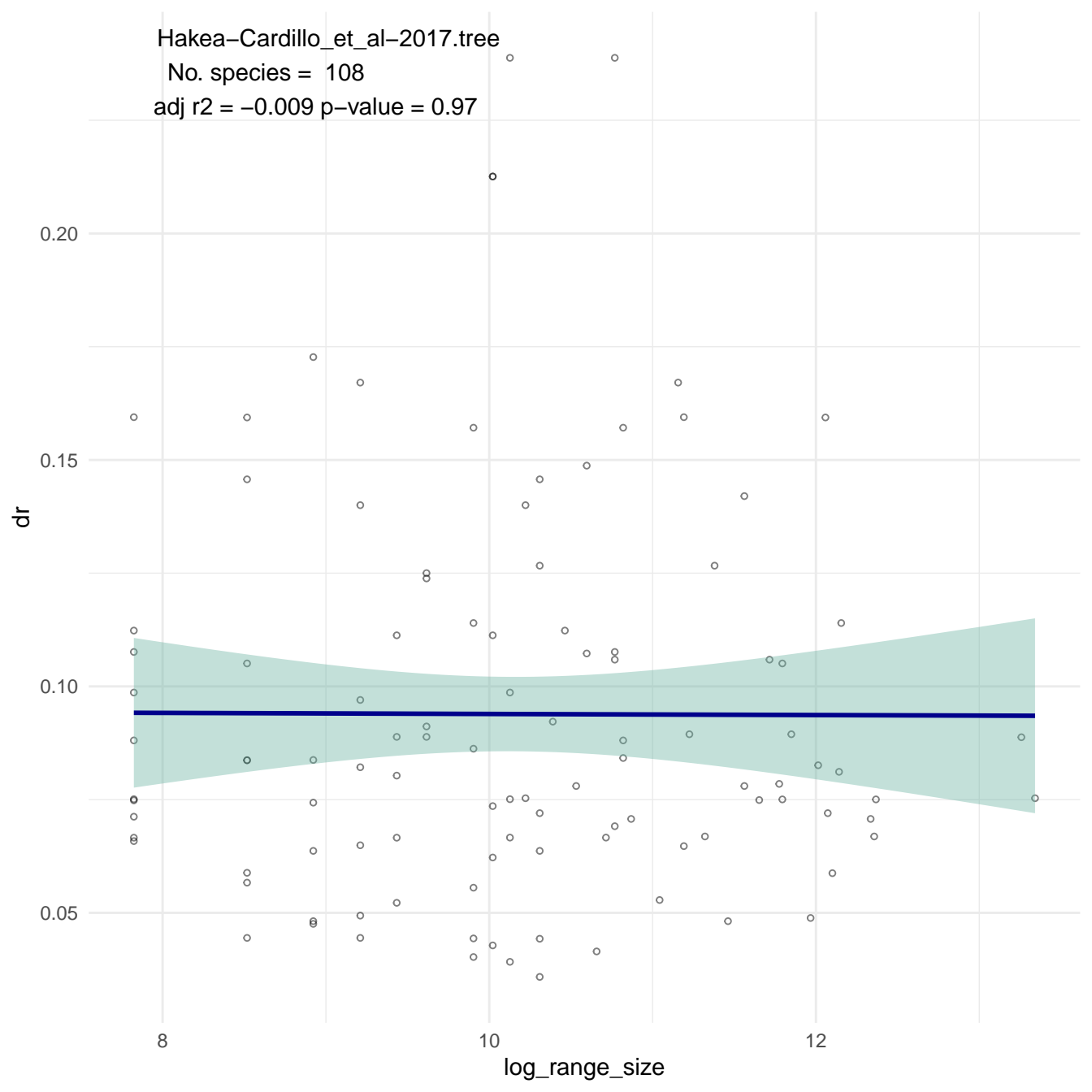
dr



Hakea-Cardillo\_et\_al-2017.tree

No. species = 108

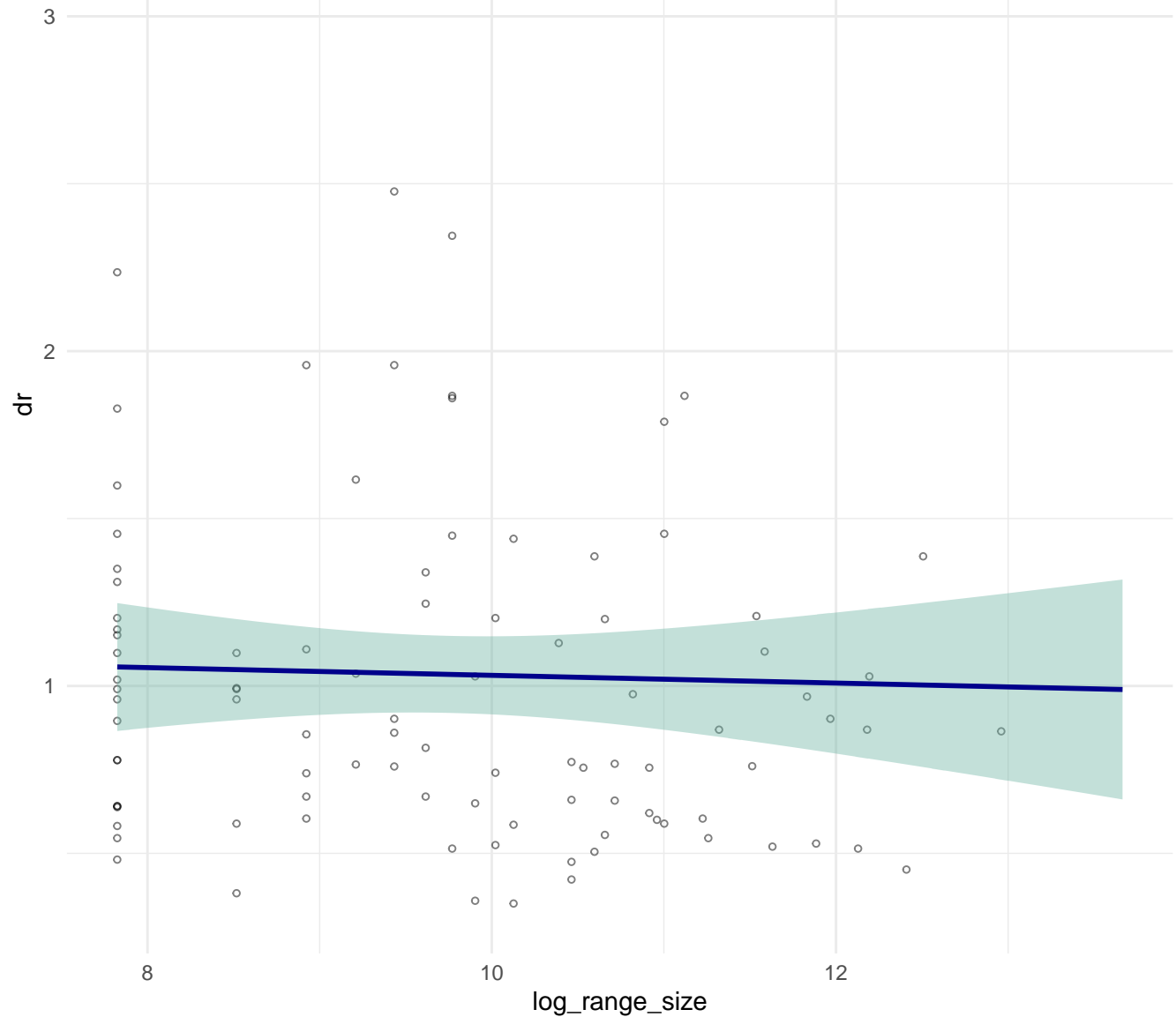
adj r2 = -0.009 p-value = 0.97



Heliconia-Iles\_et\_al-2017.tree

No. species = 98

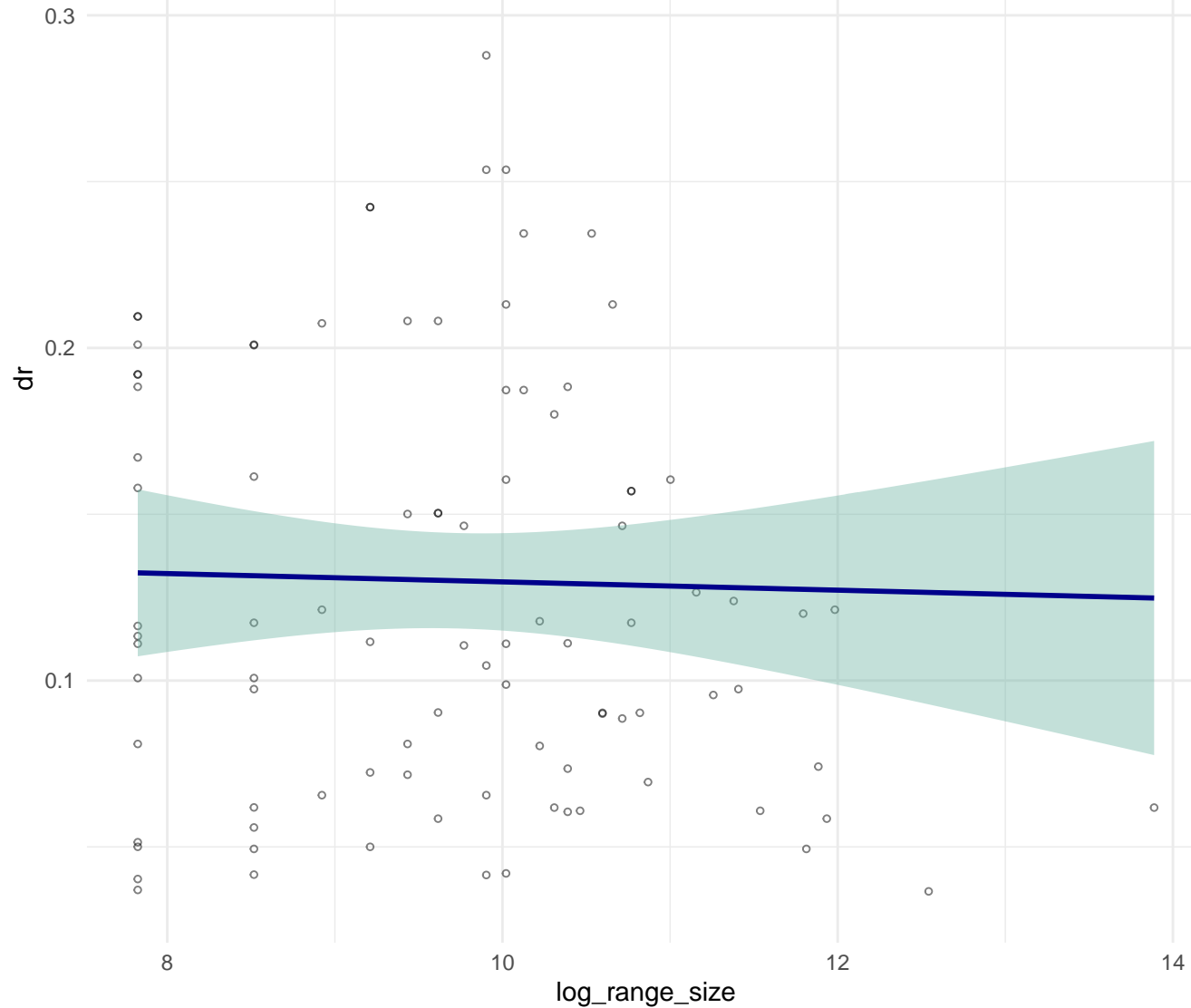
adj r2 = -0.01 p-value = 0.772



Lecythidaceae-Vargas\_&\_Dick-2020.tree

No. species = 95

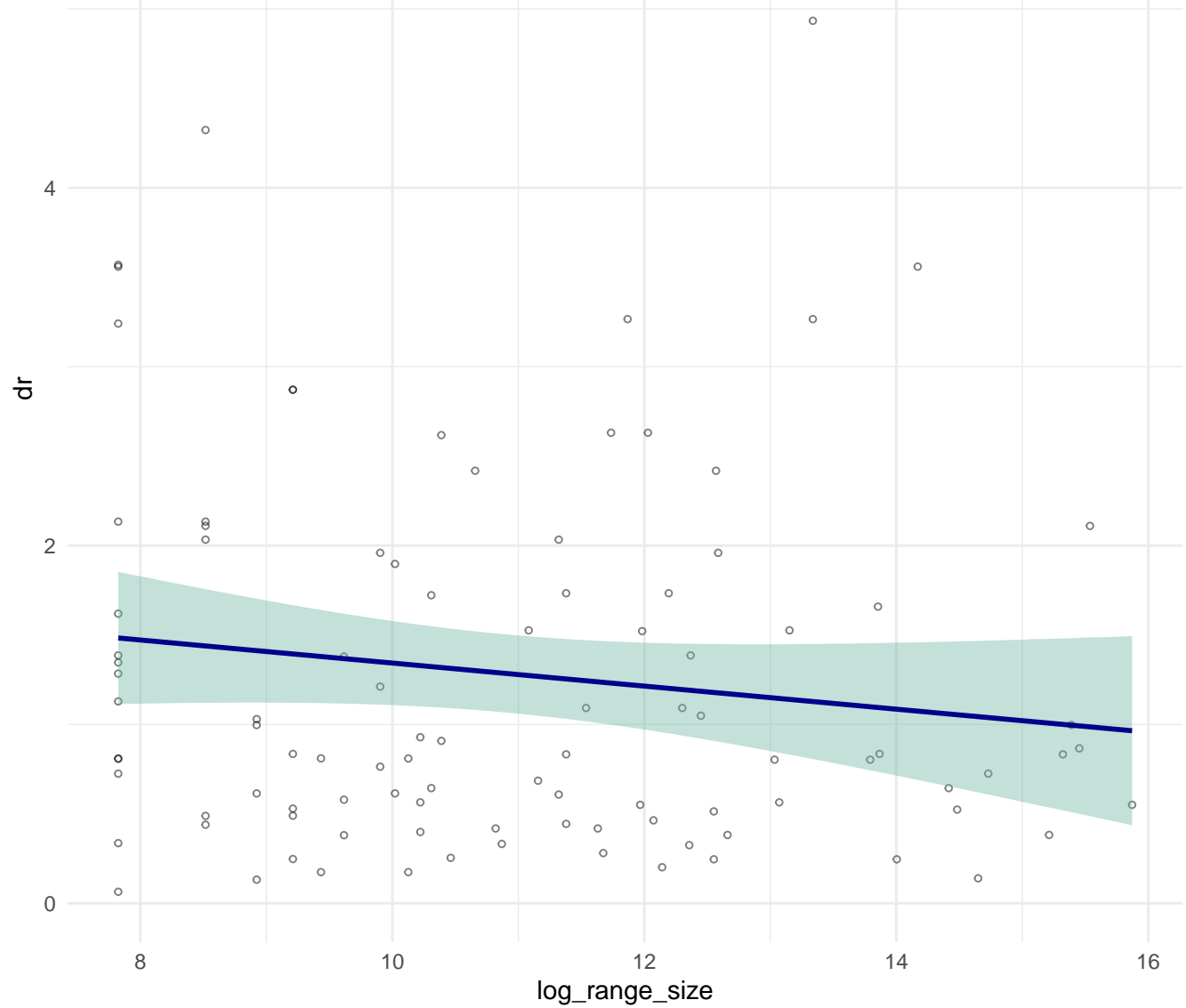
adj r2 = -0.01 p-value = 0.819



Lepidieae-Huang\_et\_al-2019.tree

No. species = 101

adj r2 = 0.007 p-value = 0.19

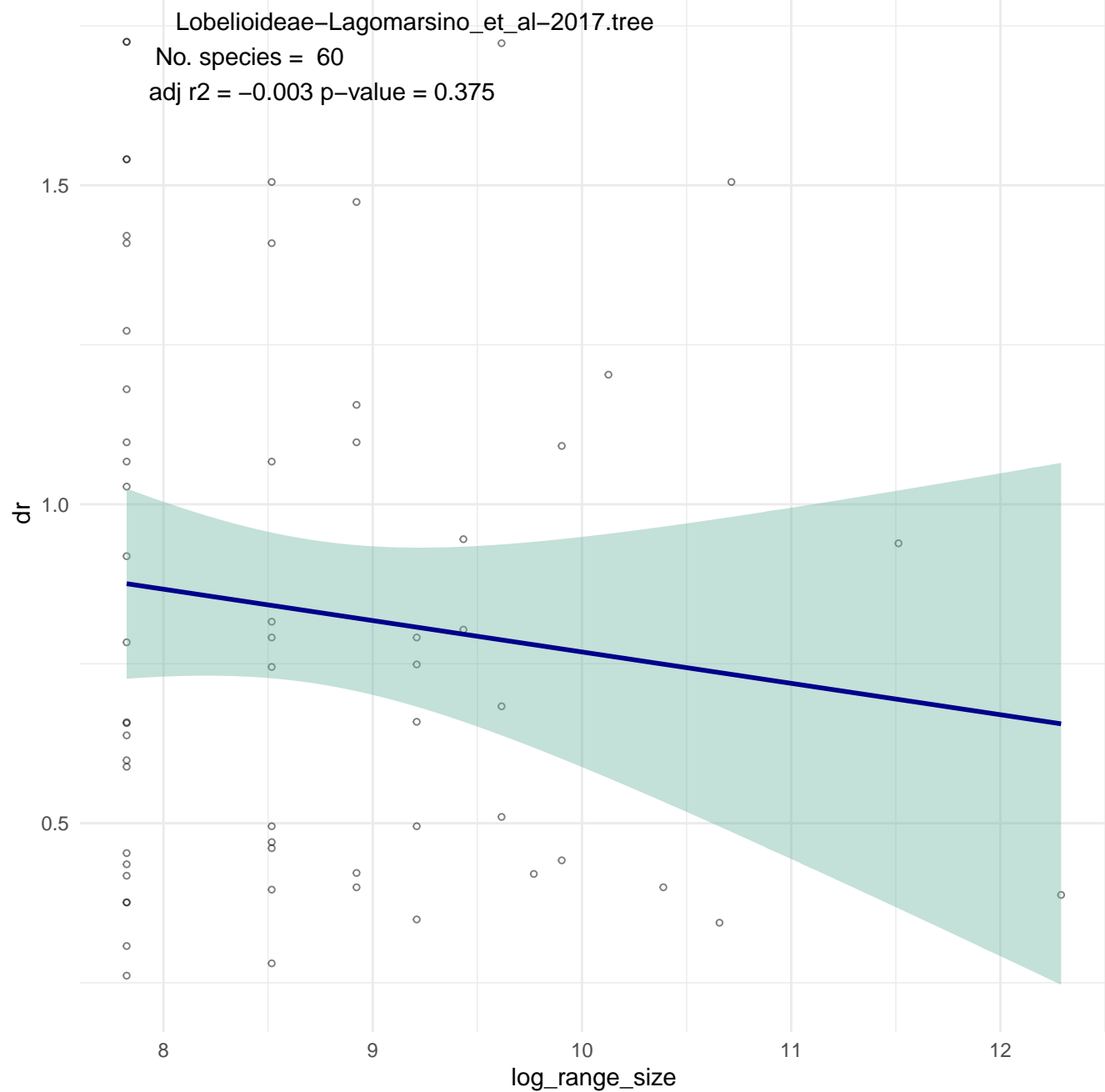




Lobelioideae-Lagomarsino\_et\_al-2017.tree

No. species = 60

adj r2 = -0.003 p-value = 0.375

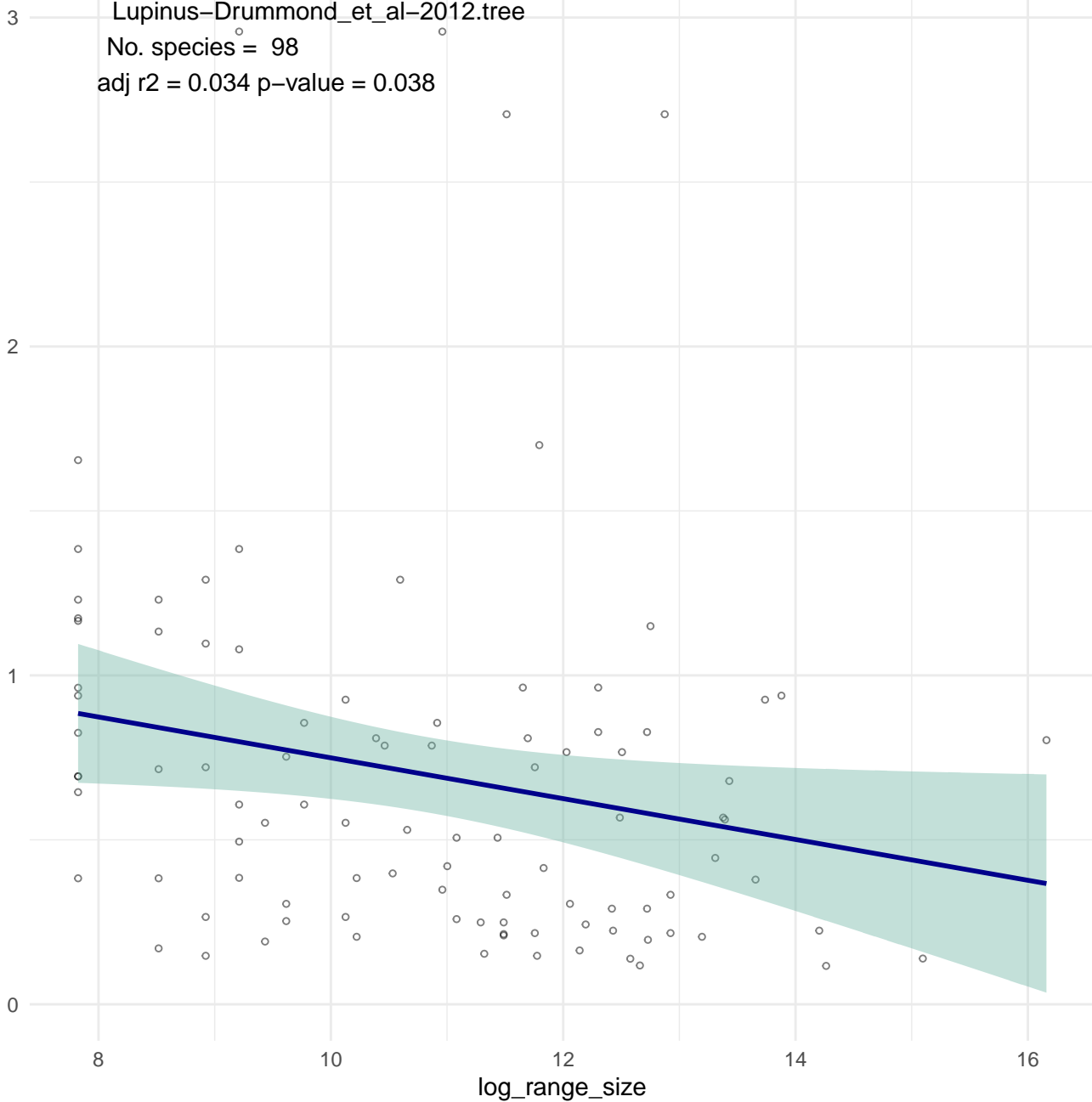


Lupinus-Drummond\_et\_al-2012.tree

No. species = 98

adj r2 = 0.034 p-value = 0.038

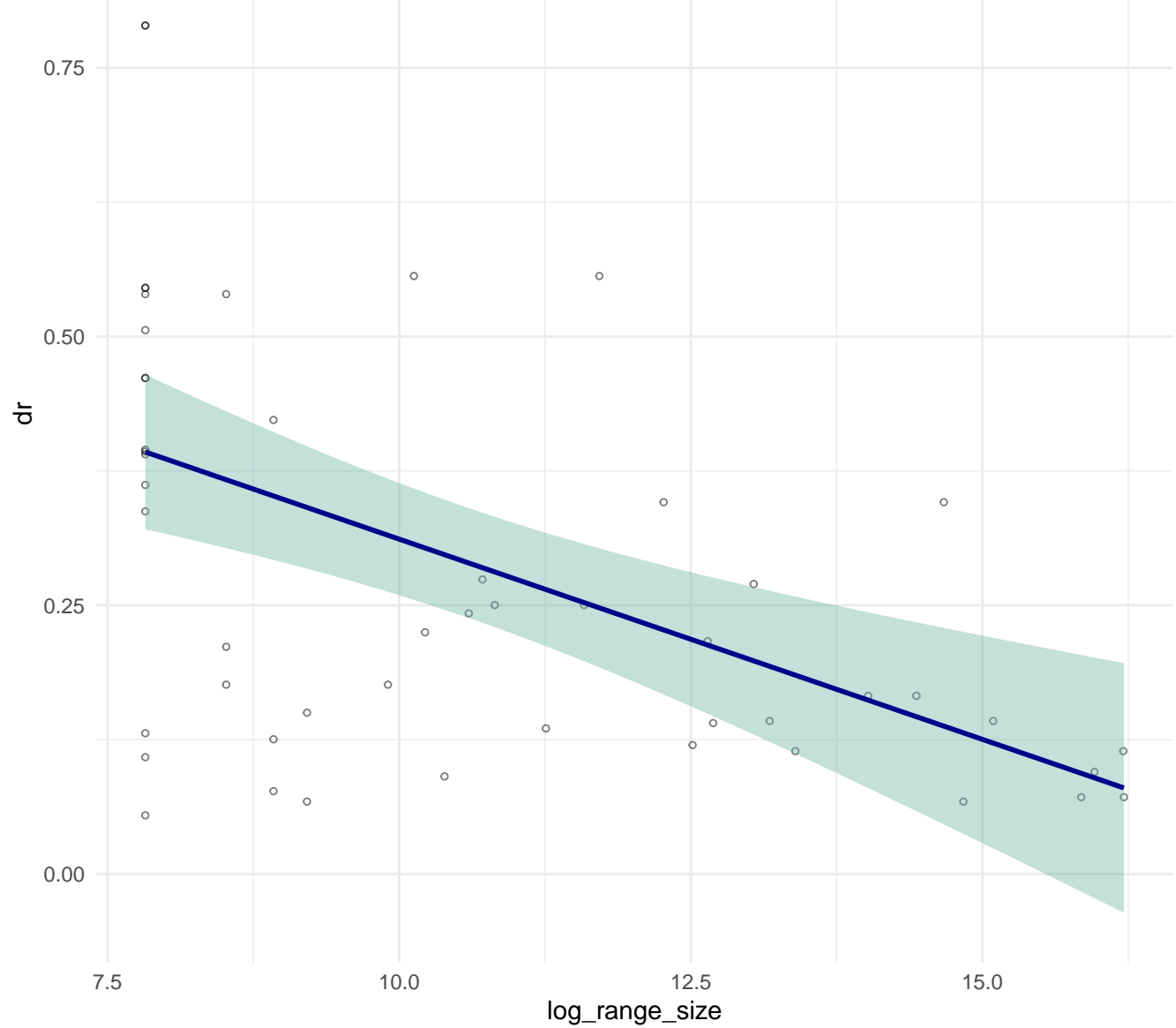
dr



Lysimachieae-Yan\_et\_al-2018.tree

No. species = 51

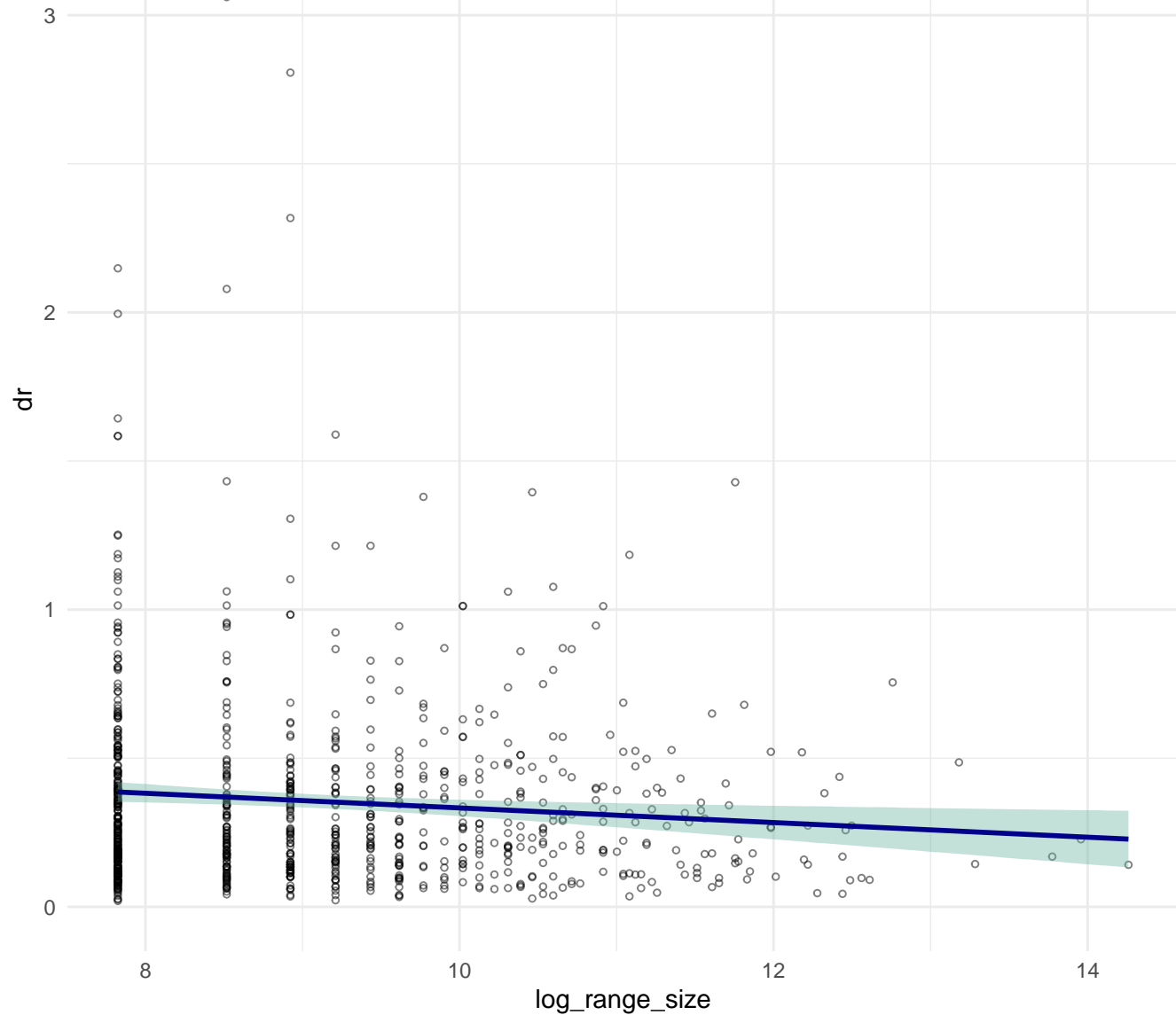
adj r2 = 0.236 p-value = 0



Melastomataceae-Reginato\_et\_al-2022.tree

No. species = 833

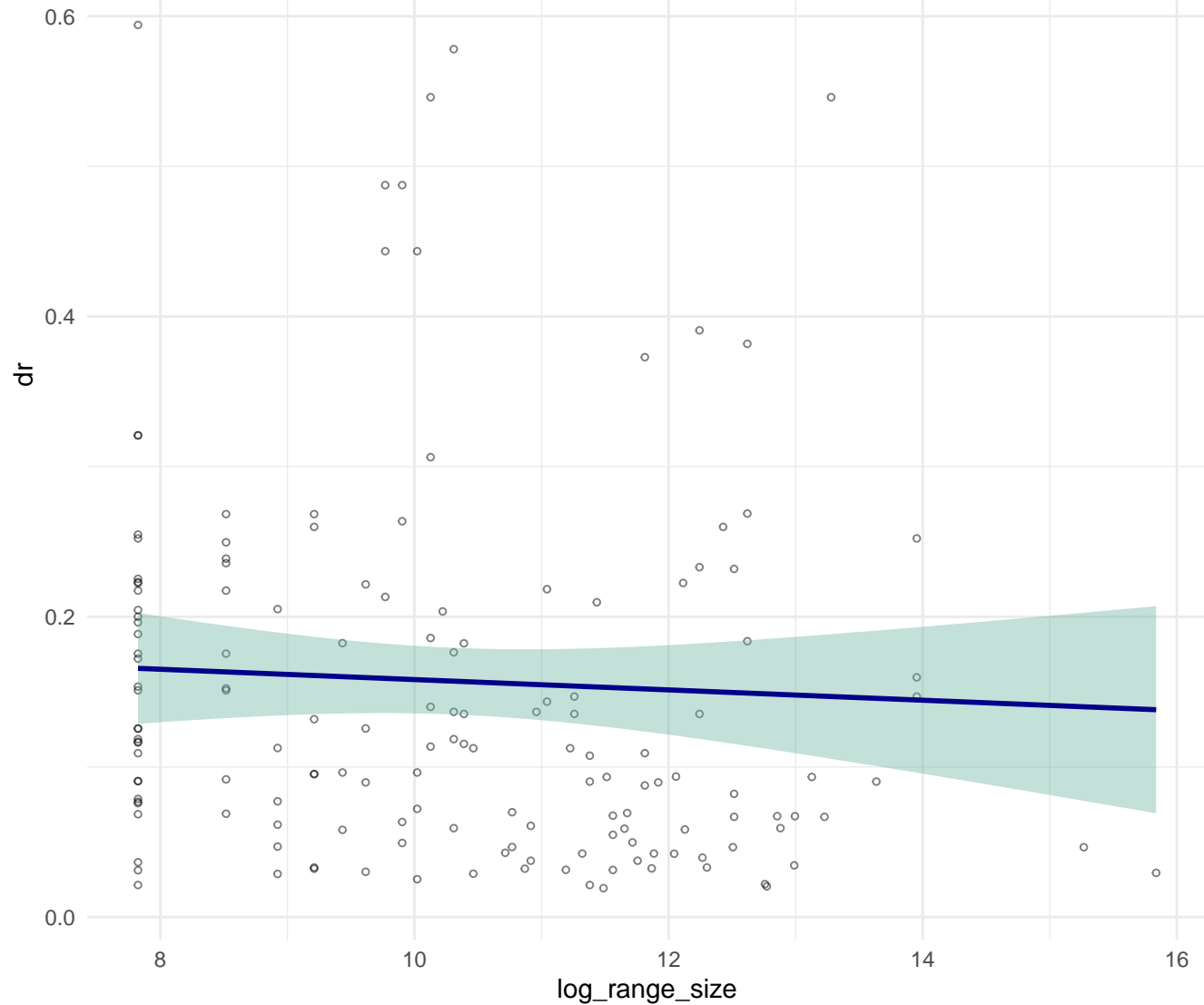
adj r2 = 0.007 p-value = 0.008



Meliaceae-Koenen\_et\_al-2015.tree

No. species = 157

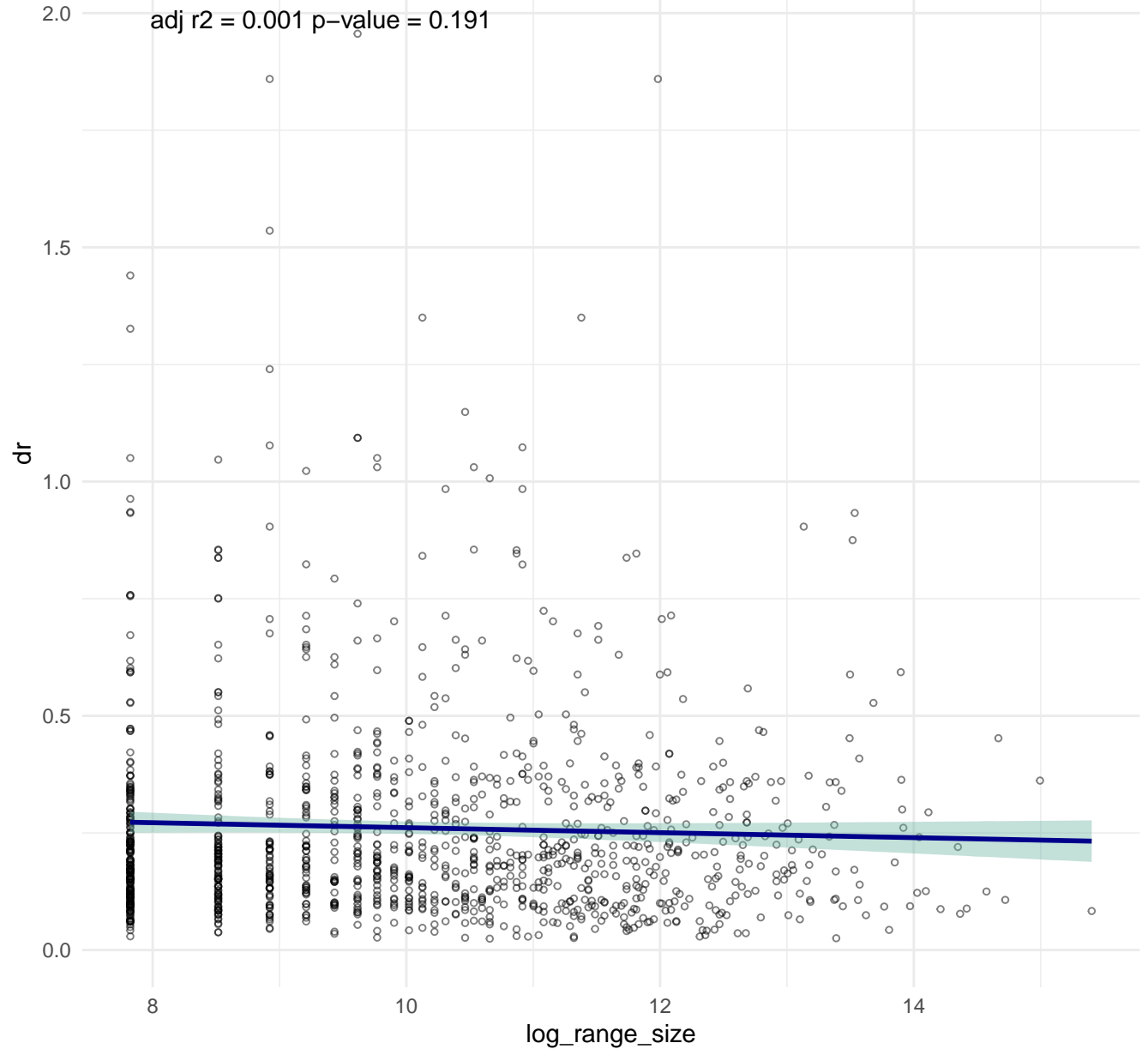
adj r2 = -0.004 p-value = 0.567



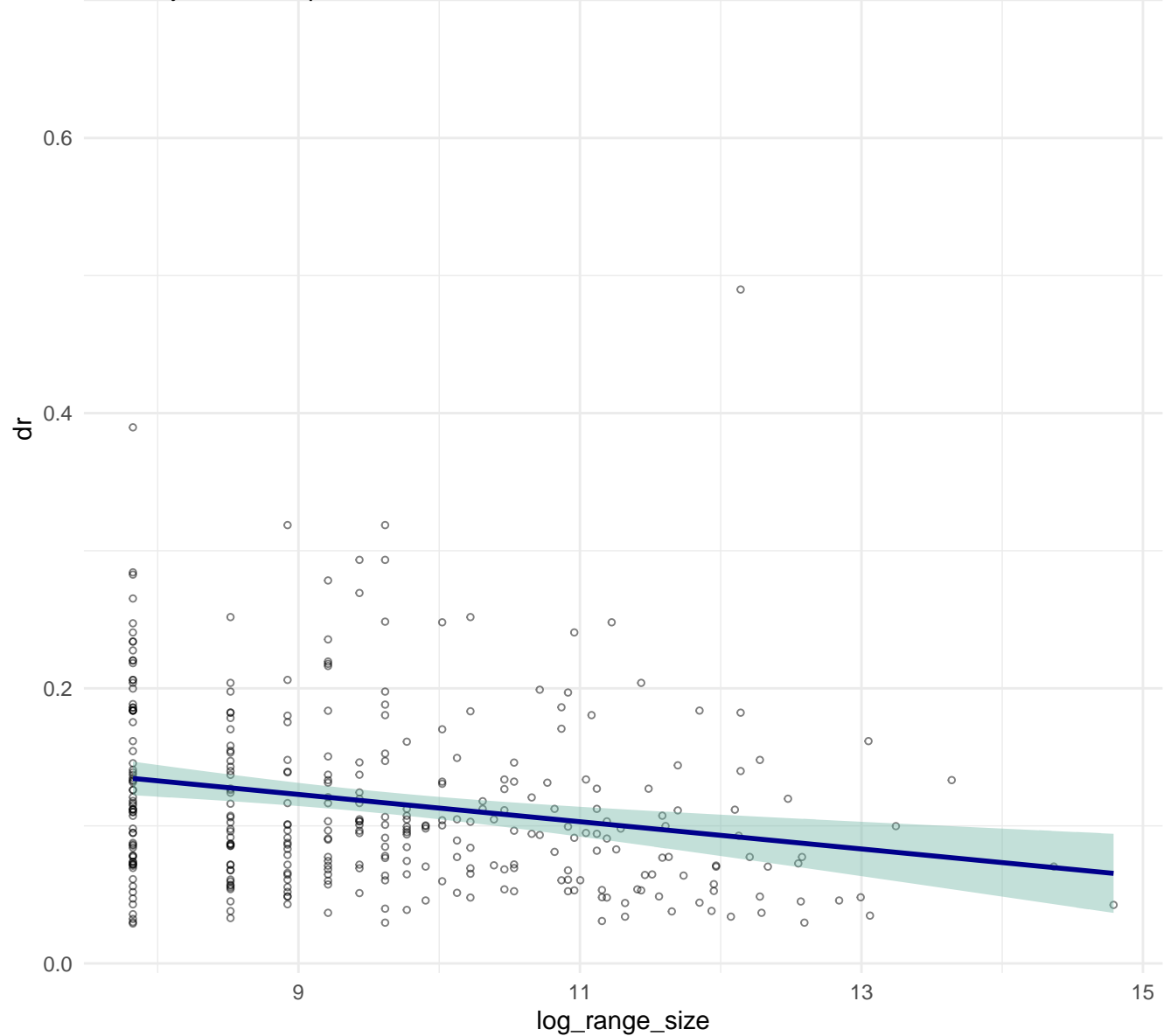
Mimosoids-Ringelberg\_et\_al-2023.tree

No. species = 1191

adj r2 = 0.001 p-value = 0.191



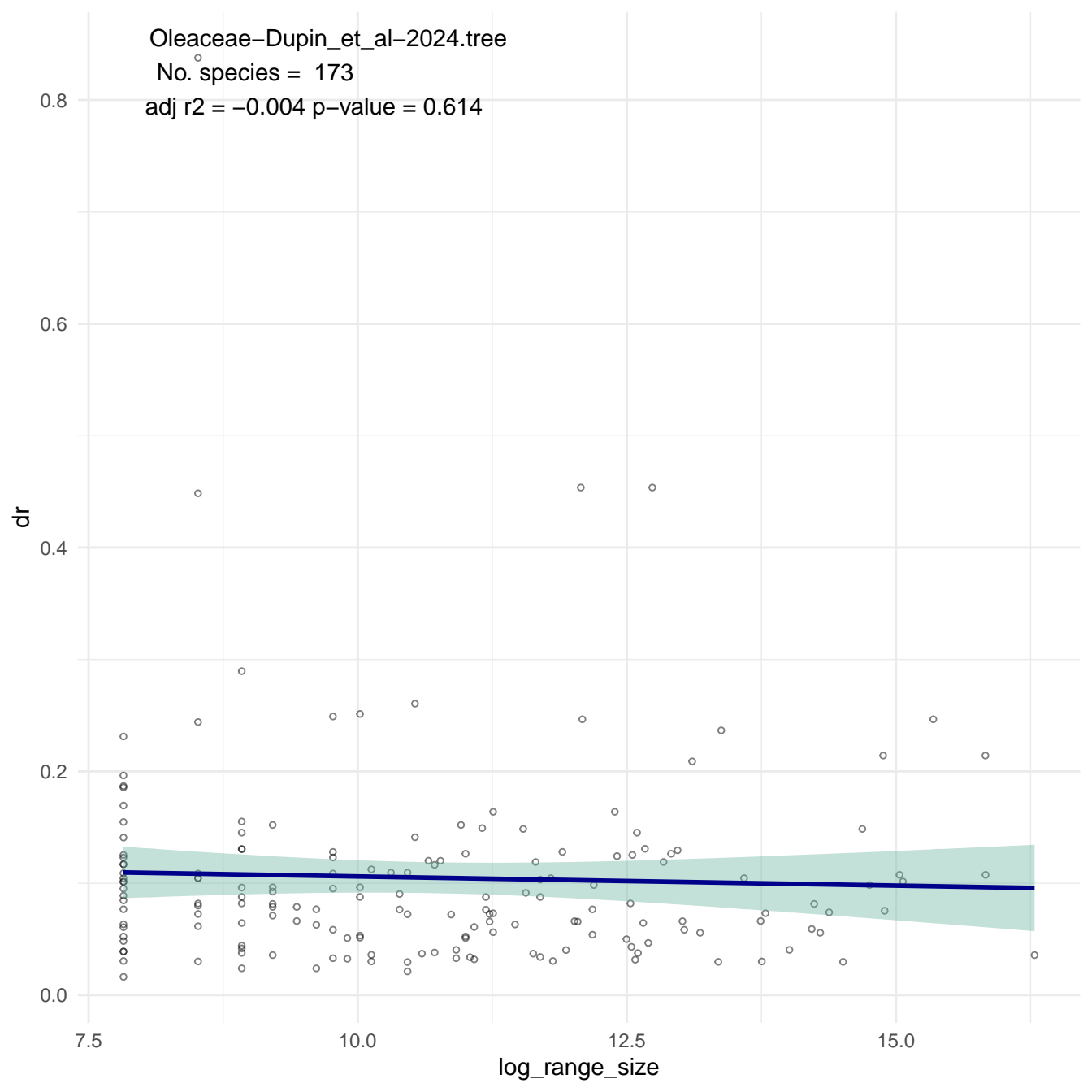
adj r2 = 0.036 p-value = 0



Oleaceae-Dupin\_et\_al-2024.tree

No. species = 173

adj r2 = -0.004 p-value = 0.614





Onagraceae-Freyman\_&\_Hohna-2018.tree

No. species = 250

adj r2 = 0.005 p-value = 0.132

dr

12

8

4

0

log\_range\_size

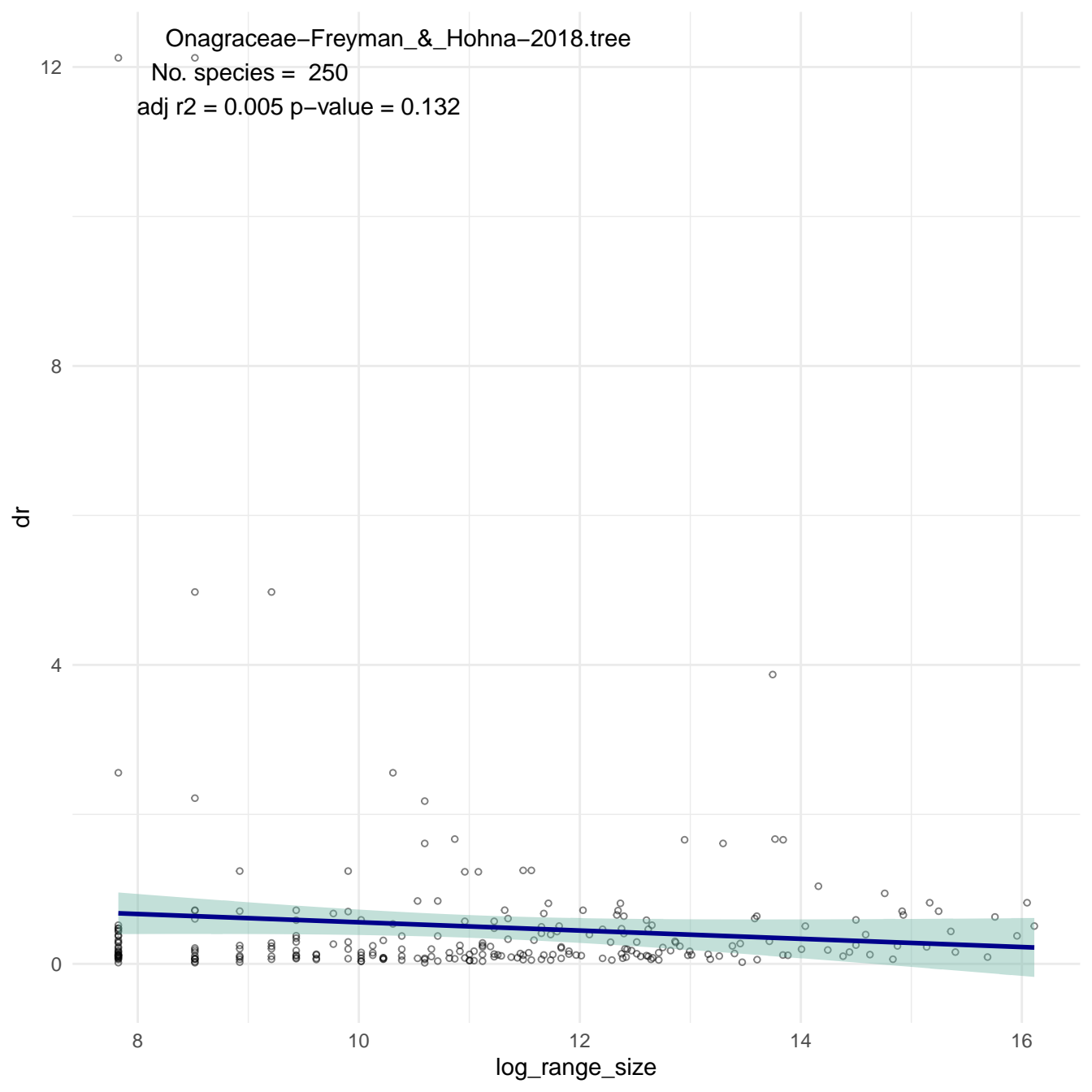
8

10

12

14

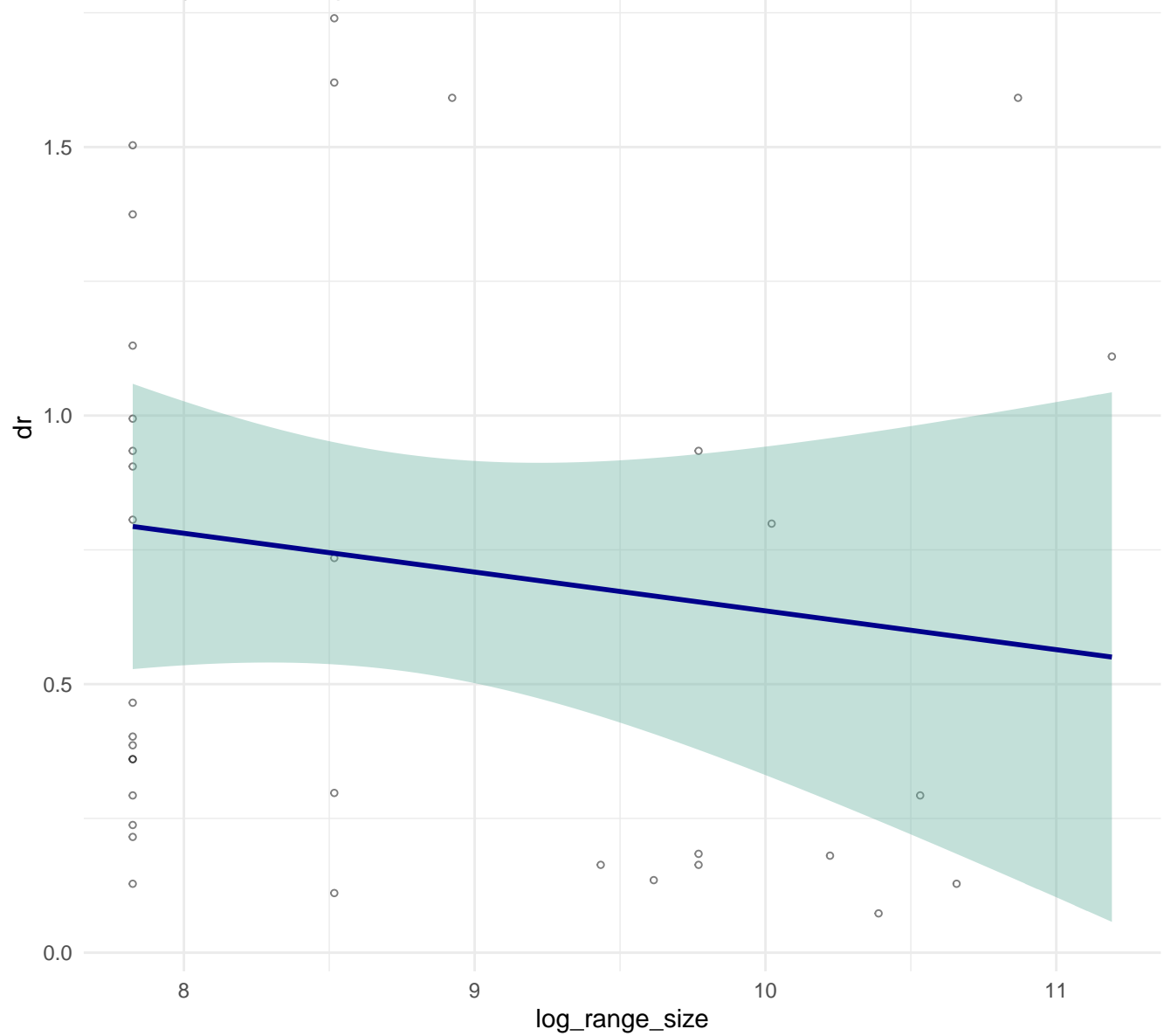
16



Paepalanthus-Vasconcelos\_et\_al-2020.tree

No. species = 36

adj r2 = -0.011 p-value = 0.433



Poaceae-Spriggs\_et\_al-2014.tree

No. species = 1981

adj r2 = 0 p-value = 0.19

dr

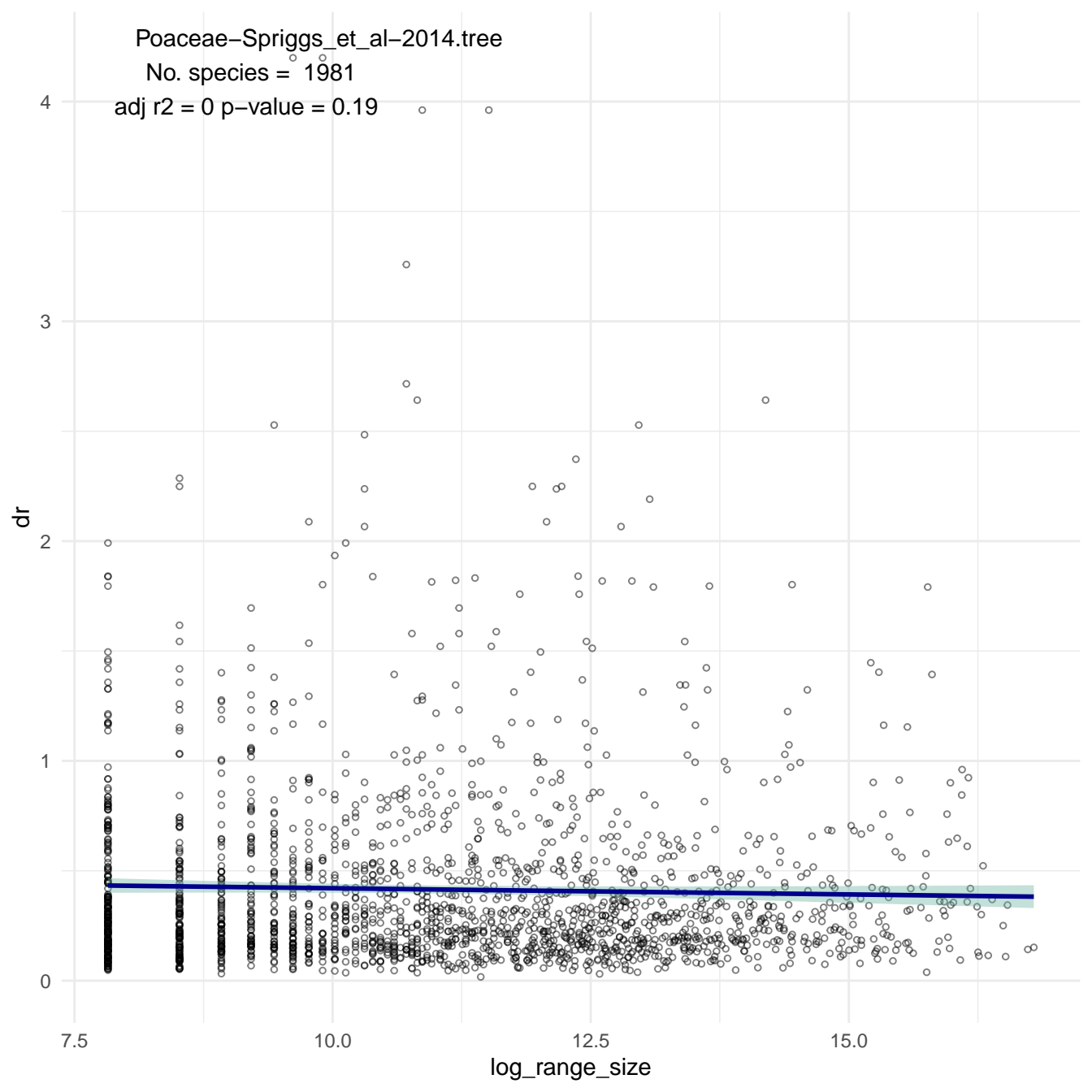
7.5

10.0

12.5

15.0

log\_range\_size

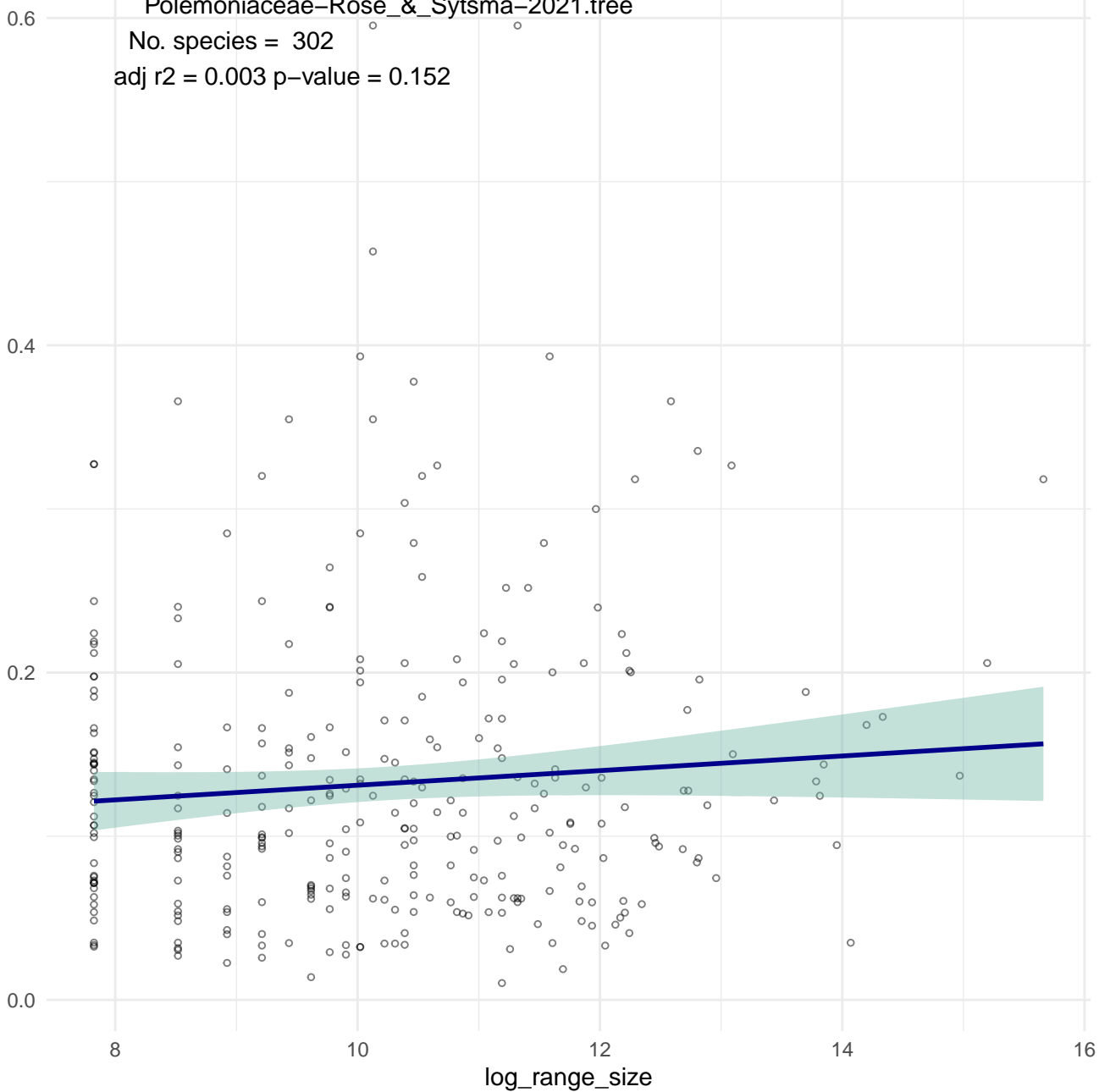


Polemoniaceae-Rose\_&\_Sytsma-2021.tree

No. species = 302

adj r2 = 0.003 p-value = 0.152

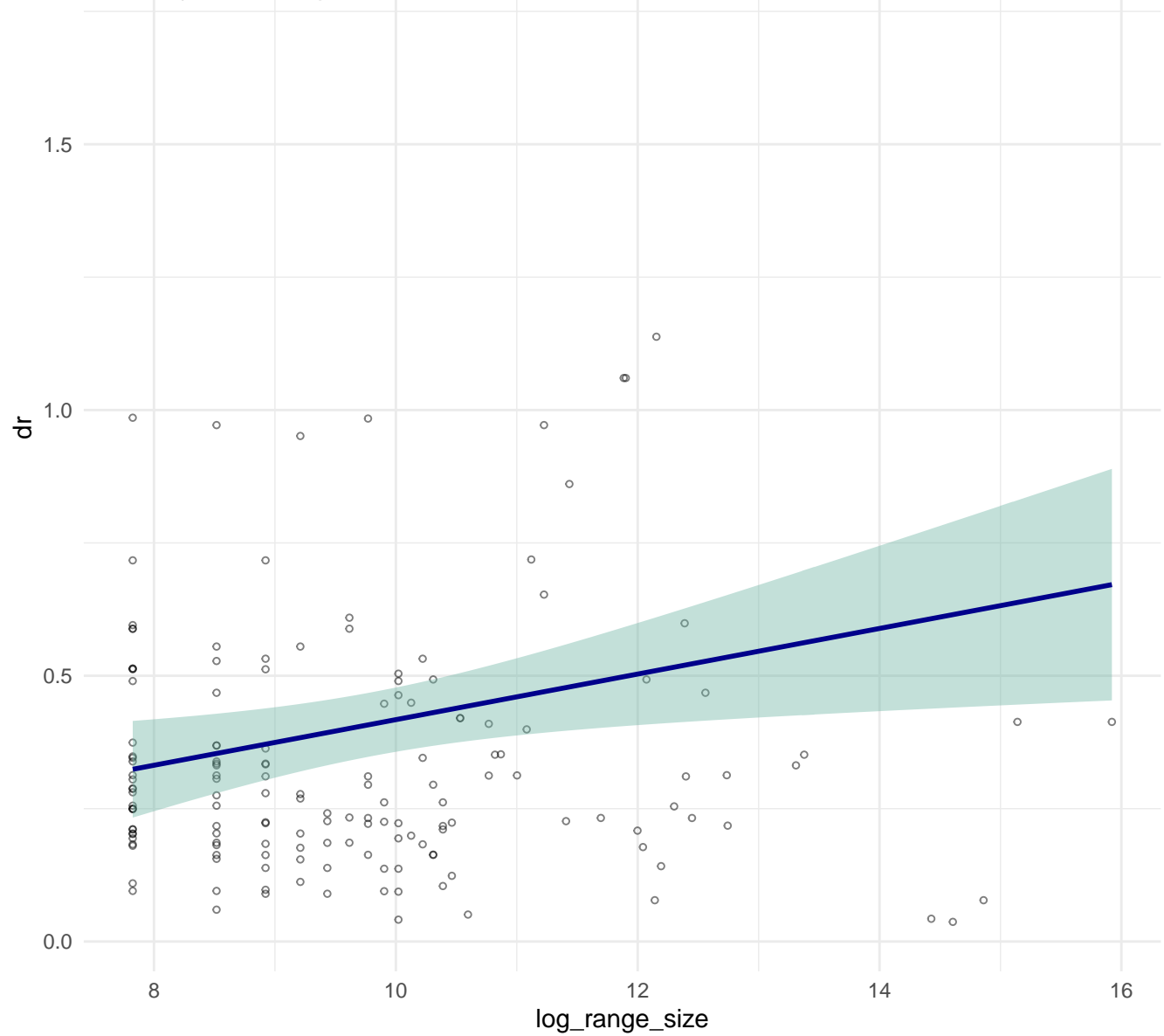
dr



Primulaceae-deVos\_et\_al-2014.tree

No. species = 163

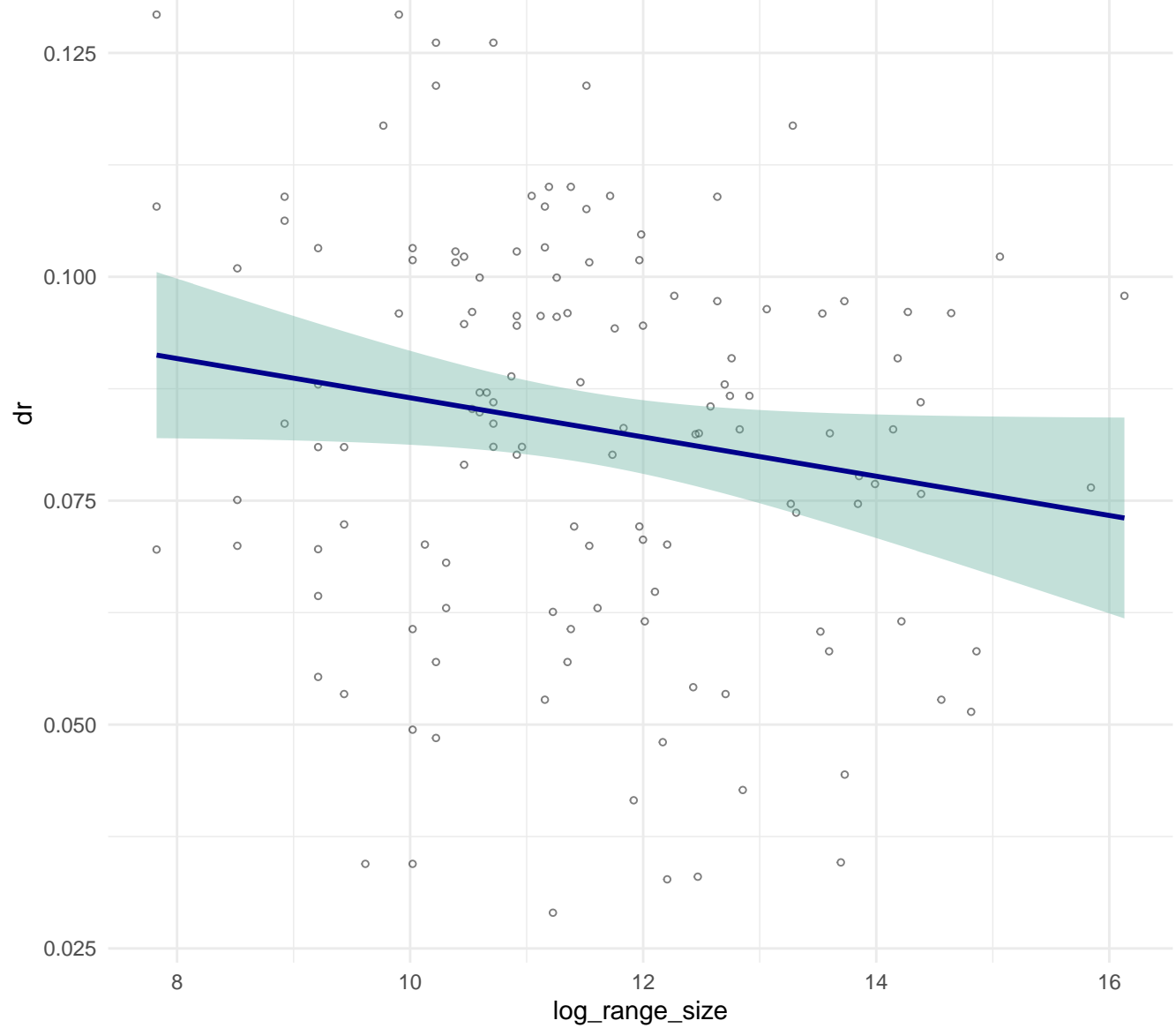
adj r2 = 0.031 p-value = 0.015



Quercus-Hipp\_et\_al-2017.tree

No. species = 135

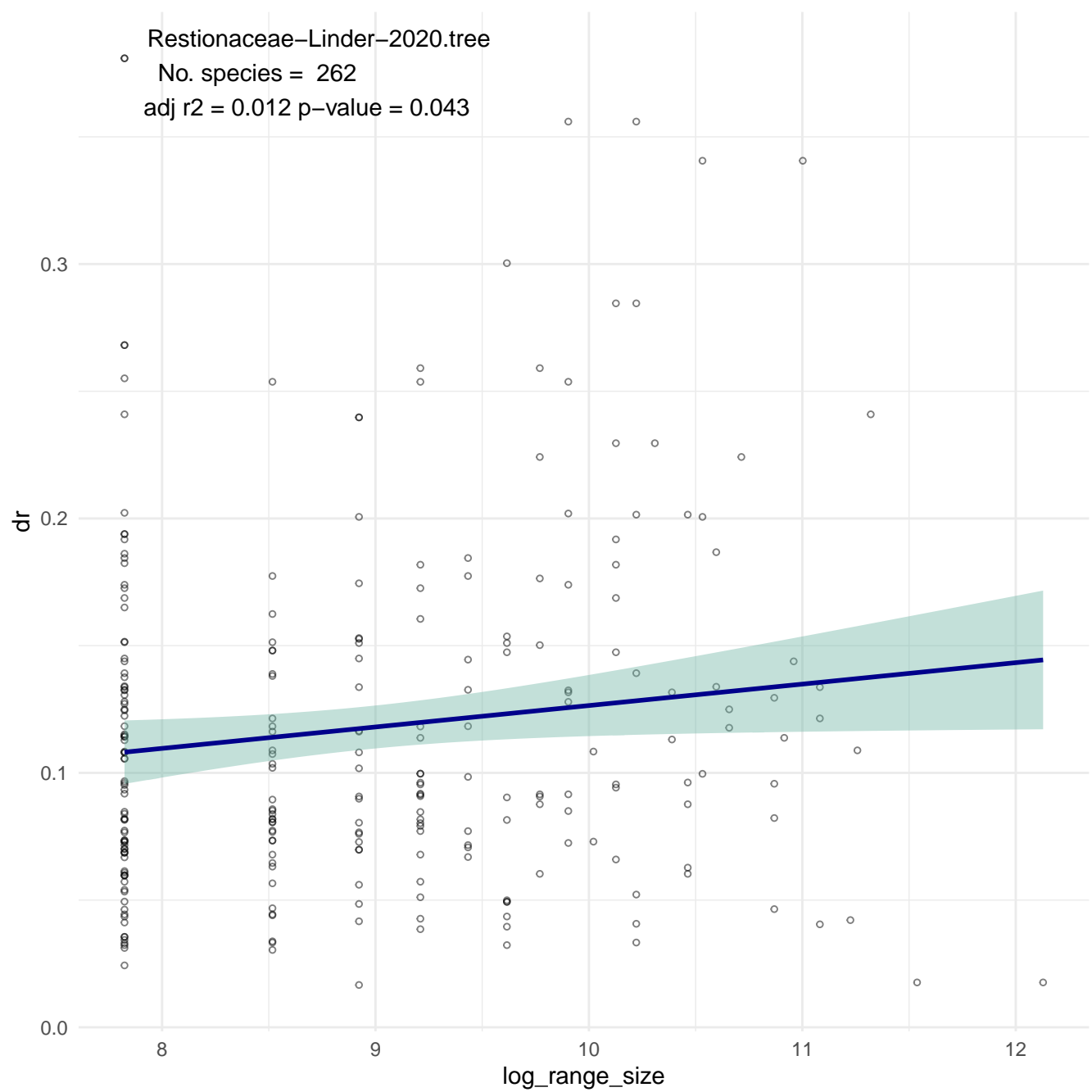
adj r2 = 0.019 p-value = 0.059



Restionaceae-Linder-2020.tree

No. species = 262

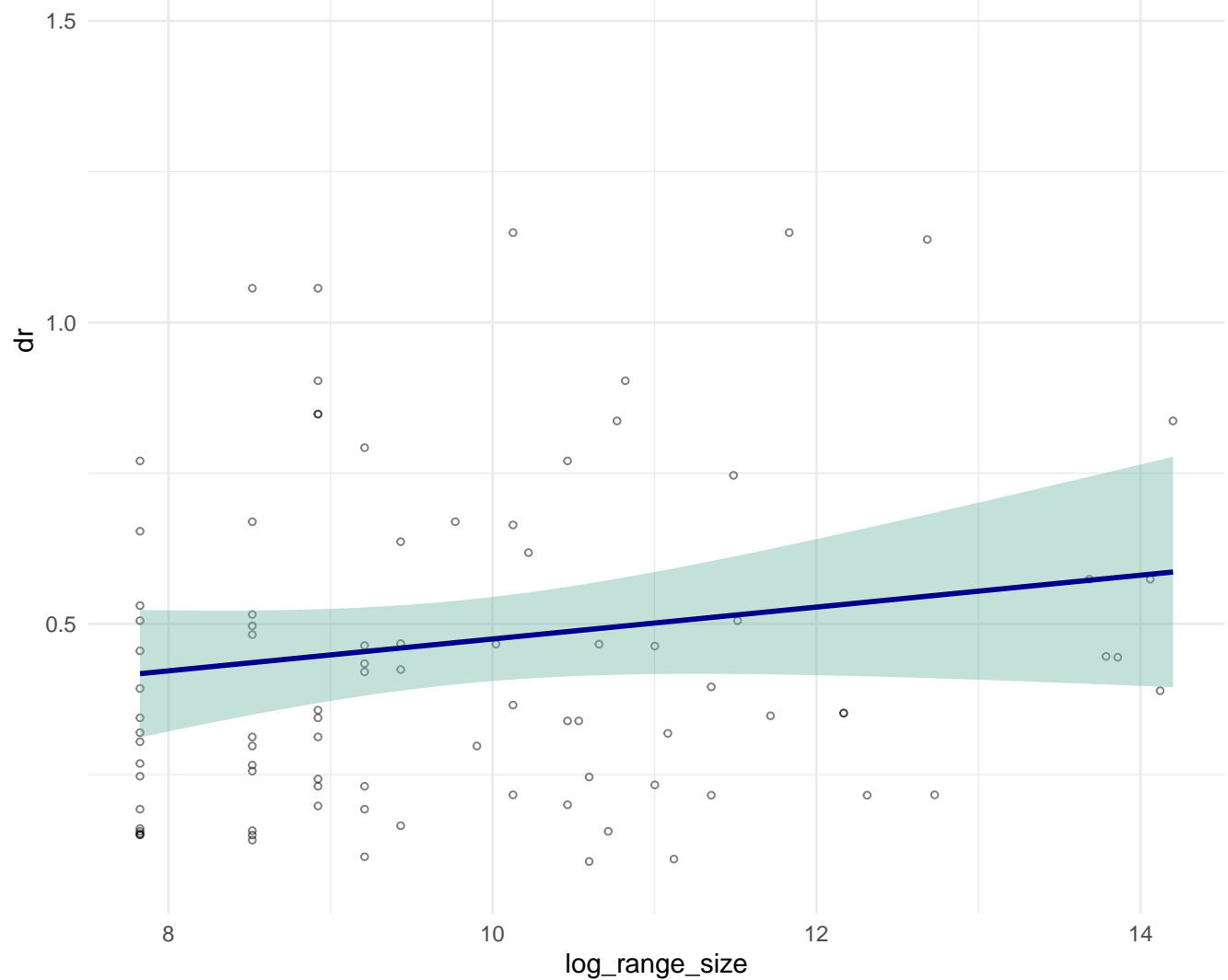
adj r2 = 0.012 p-value = 0.043



Ruellia-Tripp\_&\_Tsai-2012.tree

No. species = 91

adj r2 = 0.008 p-value = 0.197

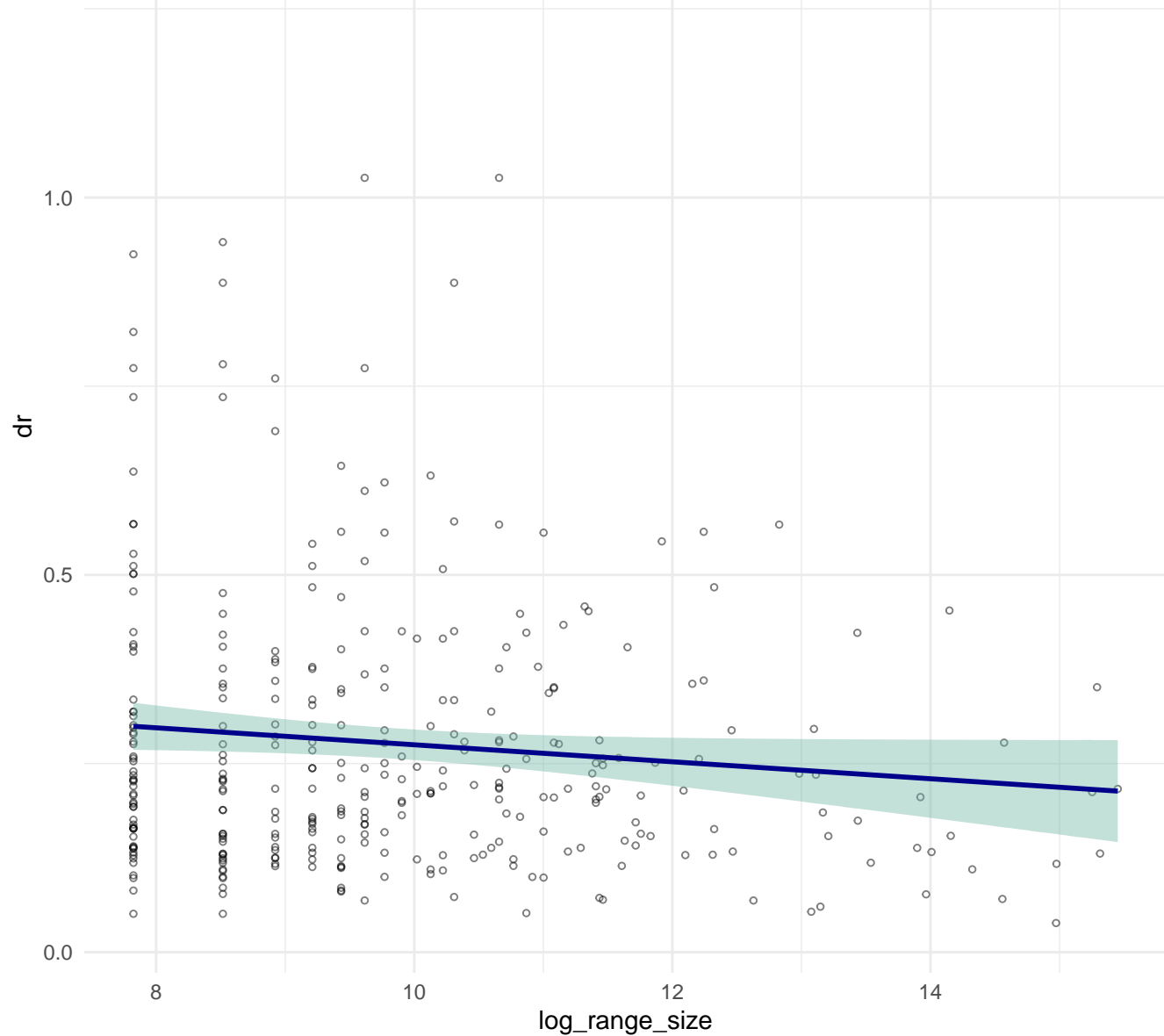




Salvia-Kriebel\_et\_al-2020.tree

No. species = 332

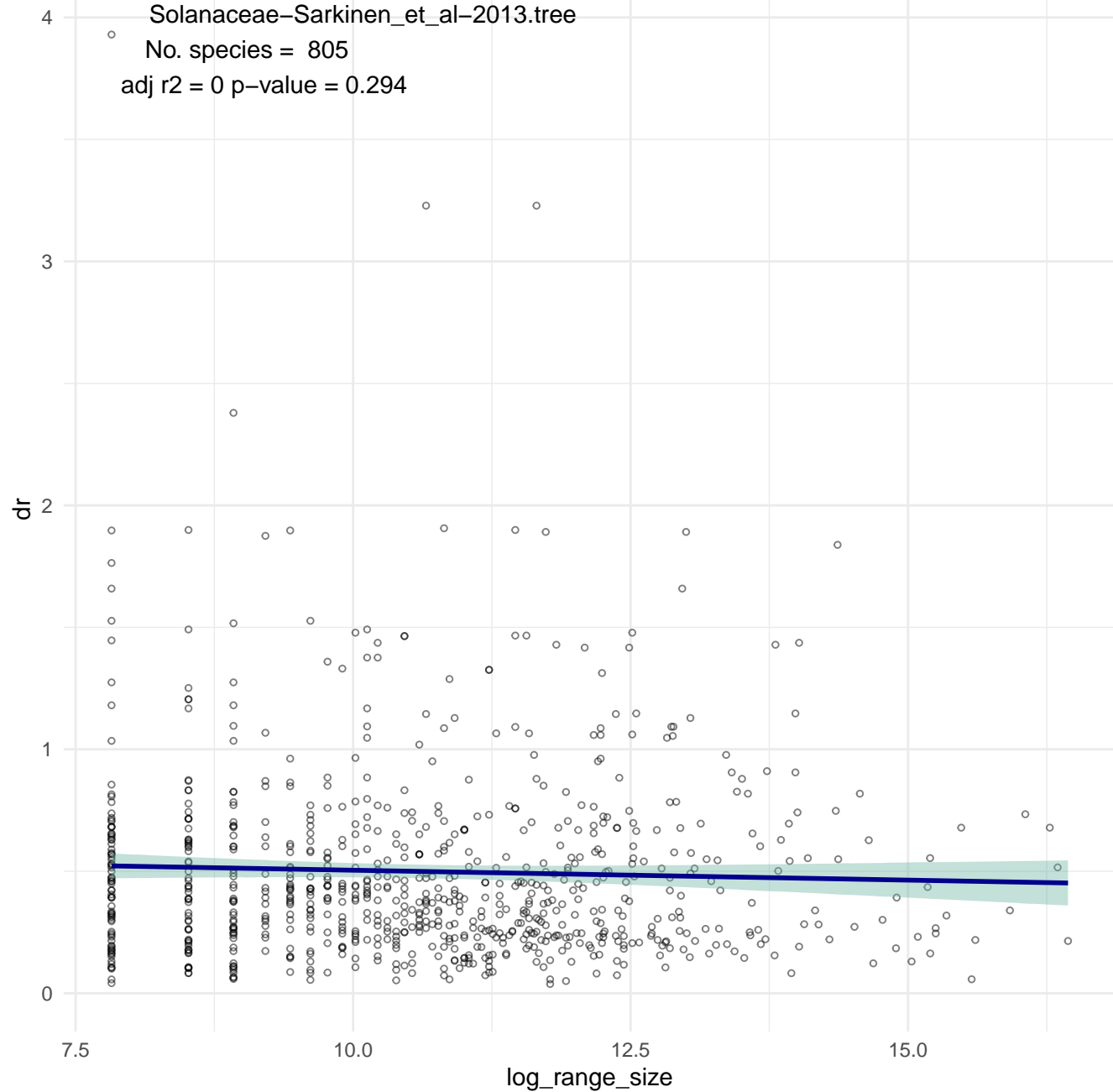
adj r<sup>2</sup> = 0.008 p-value = 0.056



Solanaceae-Sarkinen\_et\_al-2013.tree

No. species = 805

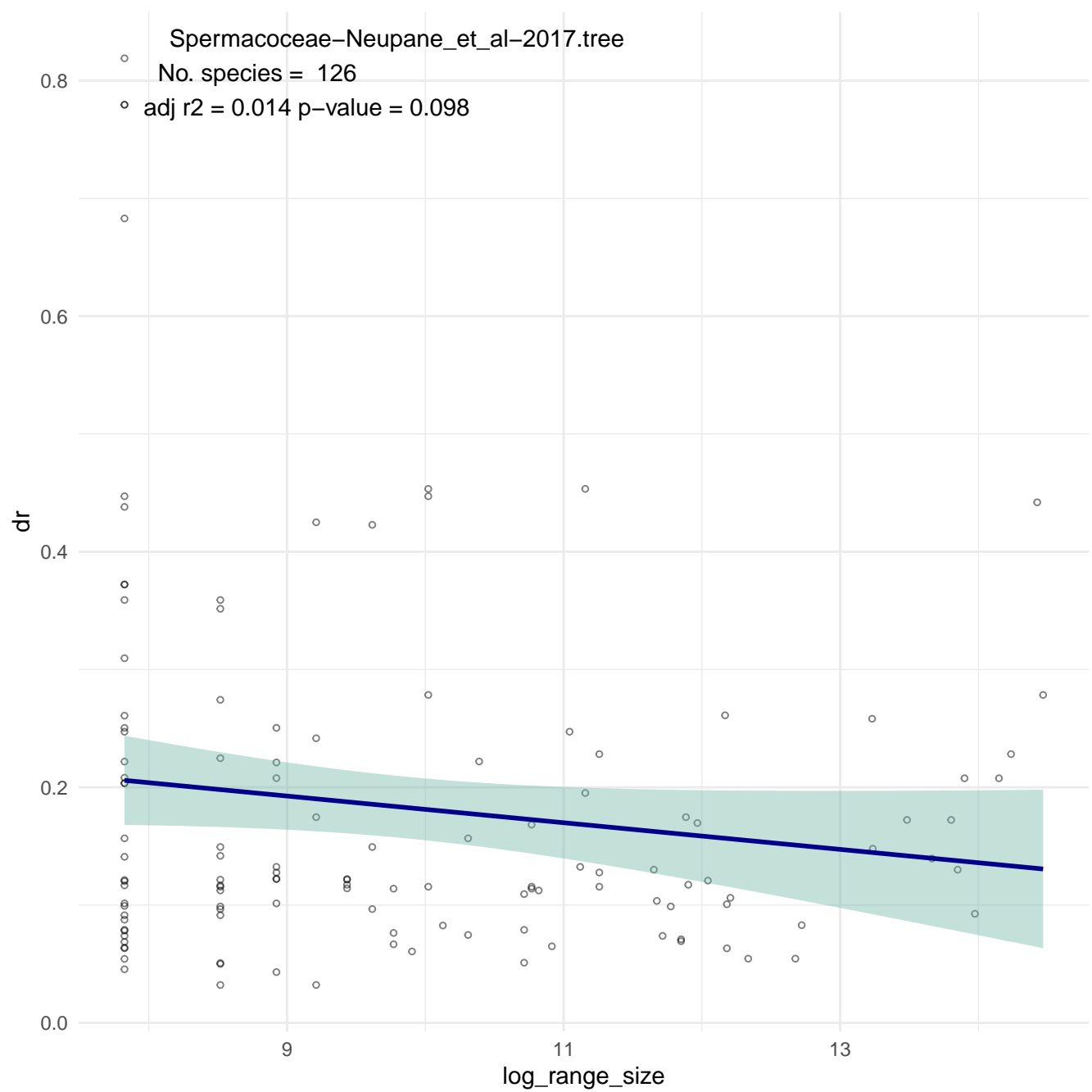
adj r2 = 0 p-value = 0.294



Spermacoceeae-Neupane\_et\_al-2017.tree

No. species = 126

◦ adj r2 = 0.014 p-value = 0.098



Thelypodieae-Huang\_et\_al-2019.tree

No. species = 83

adj r2 = 0.087 p-value = 0.004

dr

0.8

0.6

0.4

0.2

log\_range\_size

8

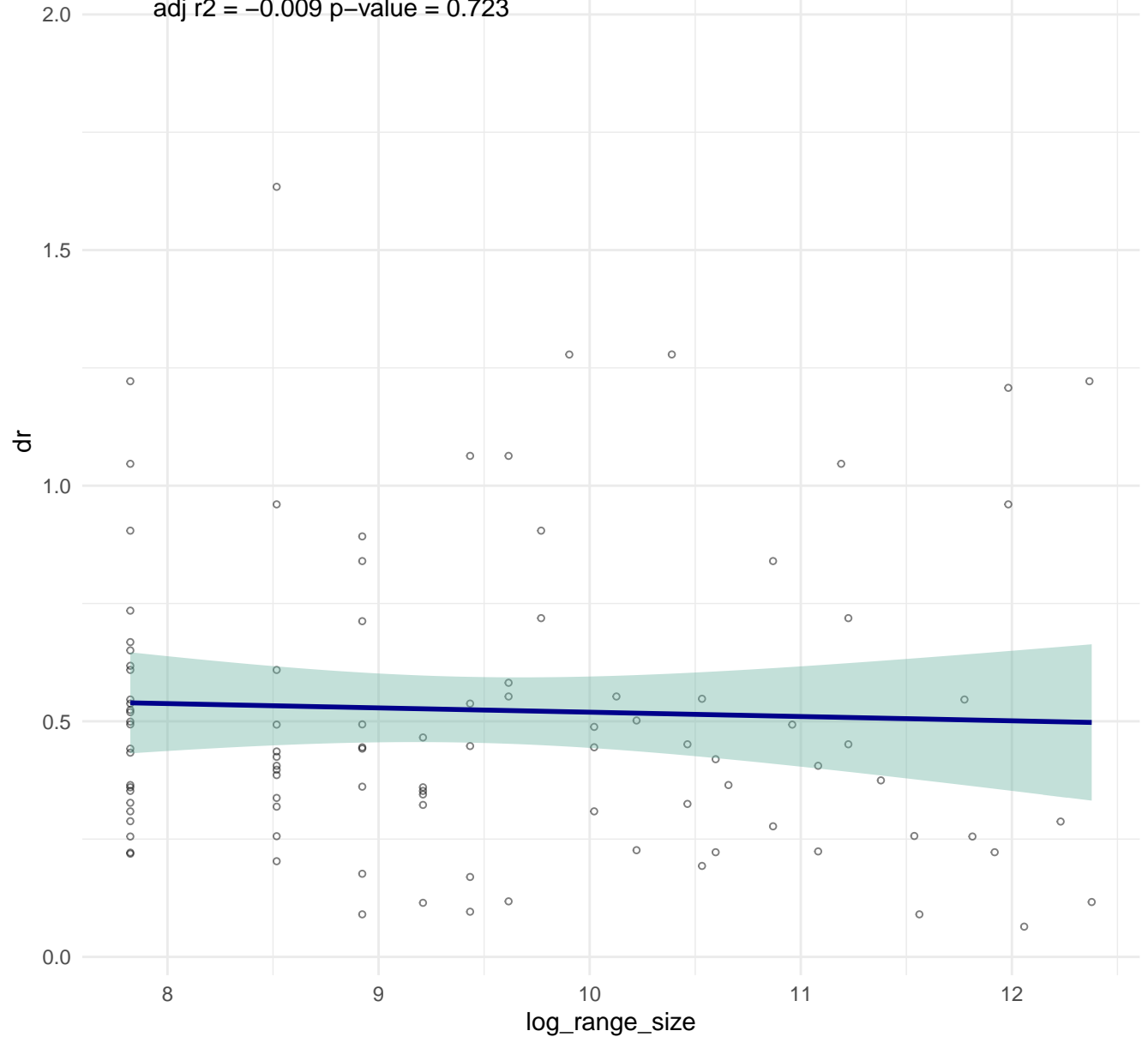
10

12

Vanguerieae-Verstraete\_et\_al-2017.tree

No. species = 100

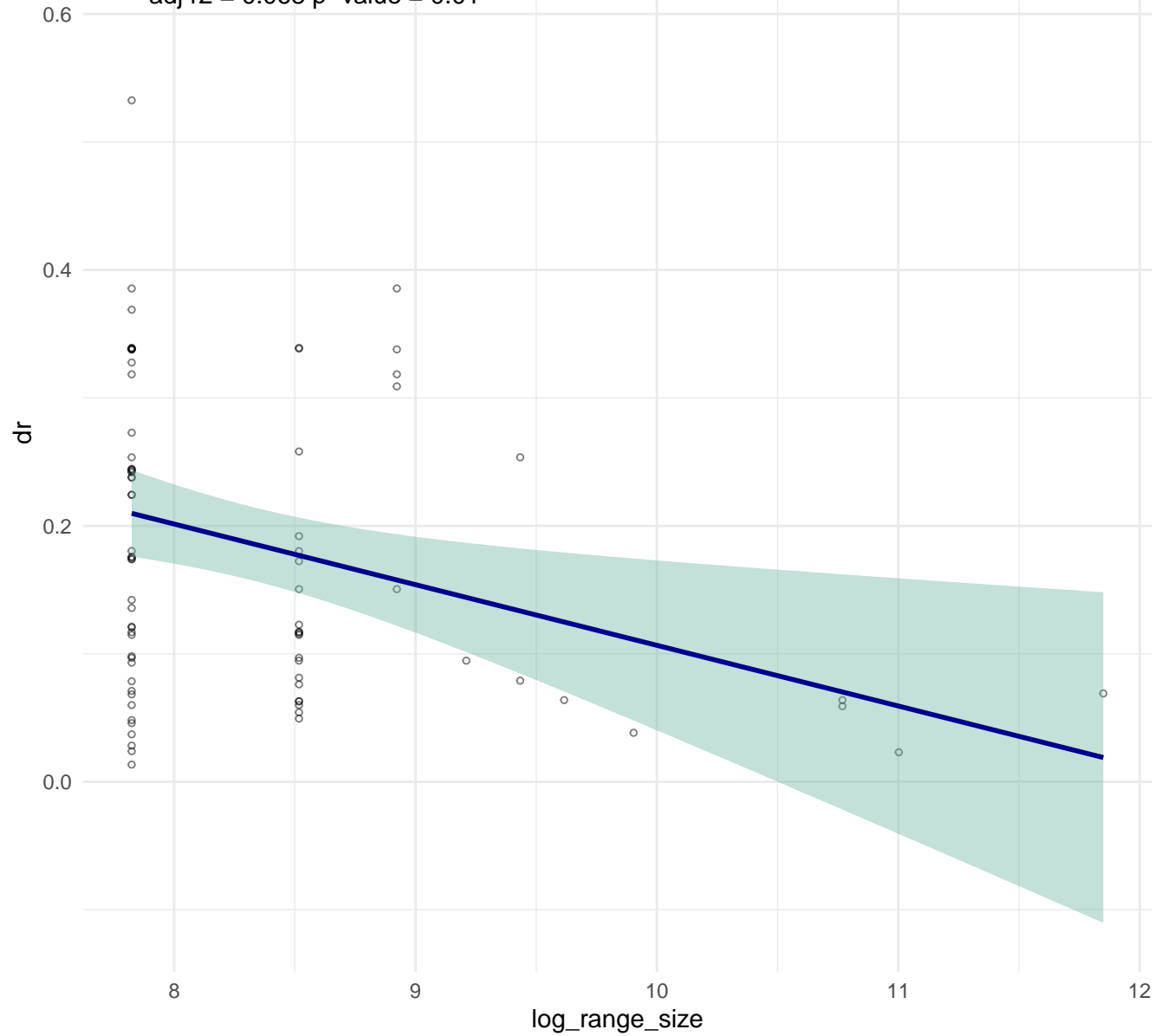
adj r2 = -0.009 p-value = 0.723



Velloziaceae-Alcantara\_et\_al-2018.tree

No. species = 83

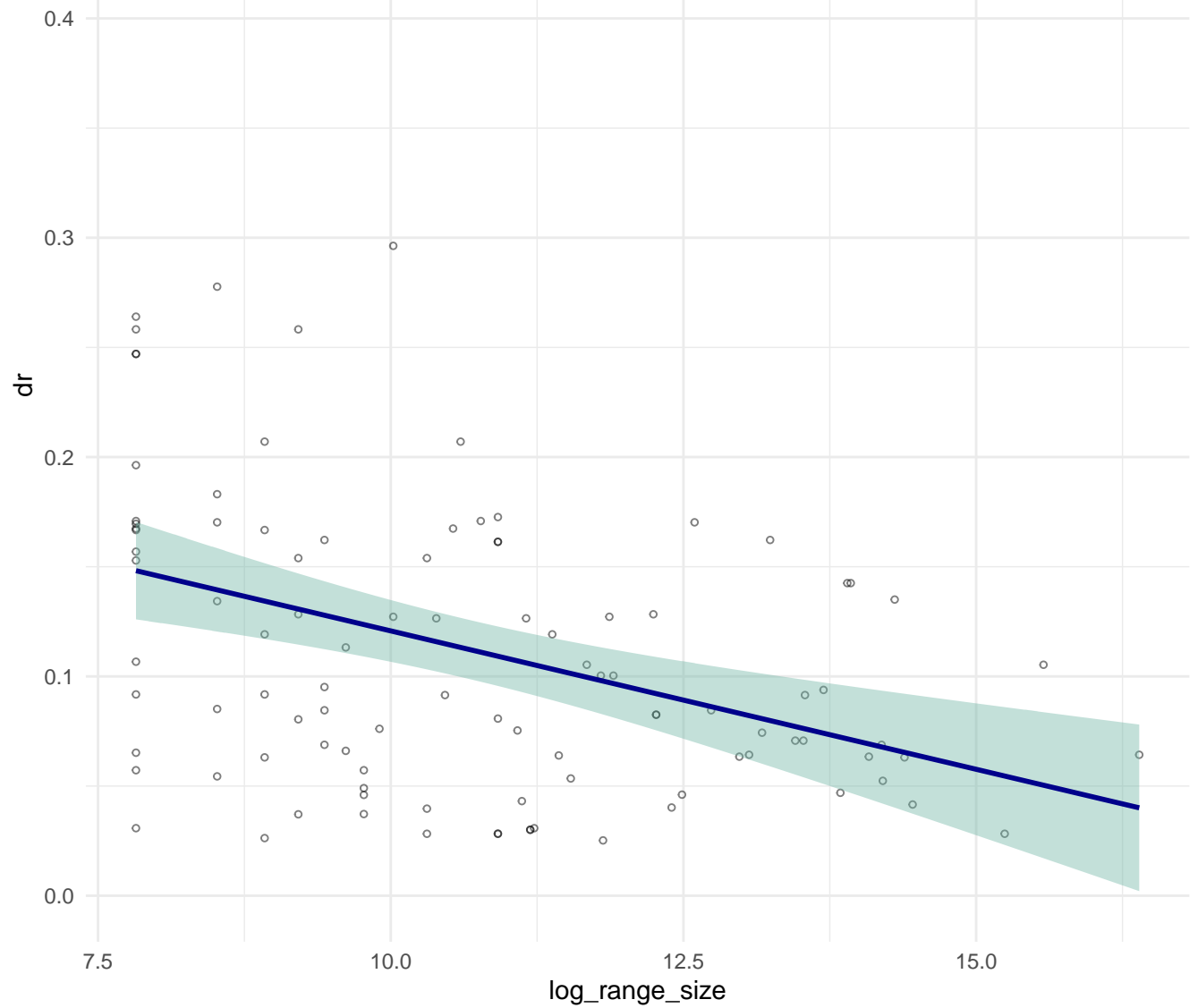
adj r2 = 0.068 p-value = 0.01



Viburnum-Landis\_et\_al-2021.tree

No. species = 102

adj r<sup>2</sup> = 0.131 p-value = 0



Vrieseinae-Kessous\_et\_al-2020.tree

No. species = 47

adj r2 = -0.022 p-value = 0.933

