## Cognates only vs Bouckaert, Bowern and Atkinson (2018) ....MangalaMcK------•······Nyangumarta--------Nyangumarta······• •······Karajarri-----•Karajarri •·······WalmajarriHR-----• .....Warlpiri------Warlpiri..... 0.99 ···Warlmanpa---------Warlmanpa·· .....Ngardily------.....Jaru-----Jaru.....Jaru ·······Ngarinyman------------Ngarinyman·······----0.87 Gurindji------Gurindji------0.97 ..... Mudburra------ Mudburra ..... -Bilinarra-----Bilinarra •----Ngaanyatjarra-\_\_-Kukatja..... -----PintupiLuritja---PintupiLuritja ...... -----Kukatja-- Ngaanyatjarra ·····• .-Wangkatja·····•• •·····Yulparija-..Warnman- ₋ 0.38 ·····Kartujarra-- Warnman .....-•----Wangkatja-Kartujarra..... -----Nyamal-√Martuthunira·····• 0.52 Nvamal..... ·····Ngarla----Ngarla-----·····Kariyarra- -Ngarluma-Kariyarra.....• ....Martuthunira-Ngarluma..... o-----Yinhawangka----------Panyjima-----..Kurrama------Kurrama.. ..Yindjibarndi-----Yindjibarndi..... ·····Thalanyji-----Thalanyji ······ 0.42 ..Purduna------Purduna..... 0.8 Payungu------•·····Tharrgari------Tharrgari ·······Warriyangga--------Warriyangga···· 0.46 ····Jiwarli-----Jiwarli··· ..Malgana------------Malgana...... 1 --Nhanta------Nhanta-------0.61 0.75 0.98 ...Wajarri-------------Wajarri...... 1 .....Badimaya------Badimaya..... ······Ngadjumaya------•-----Mirniny- -0.99 ----Wirangu-----\_-WesternArrarnta...□ ·····Wirangu-Nukunu..... ·····Nukunu- -0.86 Adnyamathanha-1 •···WesternArrarnta-Adnyamathanha....