(Chao et al., 2014)

$$H_\alpha^{\text{Chao et al. (2014) func}} = \left(\sum_{i=1}^{n} \sum_{j=1}^{n} d_{ij} \times \left(\frac{p_i p_j}{\sum\limits_{i=1}^{n} \sum\limits_{j=1}^{n} d_{ij} p_i p_j} \right)^{\alpha} \right)^{\frac{1}{1-\alpha}}$$

(1)

$$N_\alpha^{\text{Chao et al. (2014) func}} = \left(\frac{H_\alpha}{\sum\limits_{i=1}^{n} \sum\limits_{j=1}^{n} d_{ij} p_i p_j} \right)^{\frac{1}{2}}$$

(2)

References

Chao, A., Chiu, C.-H., and Jost, L. (2014). Unifying Species Diversity, Phylogenetic Diversity, Functional Diversity, and Related Similarity and Differentiation Measures Through Hill Numbers. *Annual Review of Ecology, Evolution, and Systematics*, 45:297–324. Publisher: Annual Reviews.