

$hP = \sum_j \sum_k (S_{j,k} \cdot F_{j,k}) / \sum_k (S_{k,k} \cdot F_{+,k})$	j An observed class
$hR = \sum_j \sum_k (S_{j,k} \cdot F_{j,k}) / \sum_j (S_{j,j} \cdot F_{j,+})$	k A predicted class
$hF = [(\beta^2 + 1) \cdot hP \cdot hR] / (\beta^2 \cdot hP + hR)$	S_{j,k} The length of the path from the first common ancestor of classes j and k to the root. For S_{j,j} and S_{k,k} – the depth of class j or k , respectively
$hP_k = \sum_j (S_{j,k} \cdot F_{j,k}) / (S_{k,k} \cdot F_{+,k})$	F_{j,k} The number of cases observed in class j that were classified as class k
$hR_j = \sum_k (S_{j,k} \cdot F_{j,k}) / (S_{j,j} \cdot F_{j,+})$	F_{+,k} The total number of cases classified as class k
$hF_{j=k} = [(\beta^2 + 1) \cdot hP_k \cdot hR_j] / (\beta^2 \cdot hP_k + hR_j)$	F_{j,+} The total number of cases observed as class j
	β The relative weight of precision and recall (beta.h.F as defined above)