

Table 1: SUSPICIOUSNESS FORMULAE FOR SBFL and MBFL.

Name	SBFL-Formula ($Sus(e)$)	MBFL-Formula ($Sus(m)$)
Tarantula	$\frac{\frac{a_{ef}}{a_{ef}+a_{ep}}}{\frac{a_{ef}}{a_{ef}+a_{nf}} + \frac{a_{ep}}{a_{ep}+a_{np}}}$	$\frac{\frac{a_{kf}}{a_{kf}+a_{kp}}}{\frac{a_{kf}}{a_{kf}+a_{nf}} + \frac{a_{kp}}{a_{kp}+a_{np}}}$
Op2	$ef - \frac{a_{ep}}{a_{ep}+a_{np}+1}$	$a_{kf} - \frac{a_{kp}}{a_{kp}+a_{np}+1}$
Jaccard	$\frac{a_{ef}}{a_{ef}+a_{nf}+a_{np}}$	$\frac{a_{kf}}{a_{kf}+a_{nf}+a_{np}}$
Ochiai	$\frac{a_{ef}}{\sqrt{(a_{ef}+a_{nf})*(a_{ef}+a_{ep})}}$	$\frac{a_{kf}}{\sqrt{(a_{kf}+a_{nf})*(a_{kf}+a_{kp})}}$
ER1 _a	$\begin{cases} -1 & \text{if } a_{nf} > 0 \\ a_{np} & \text{otherwise} \end{cases}$	$\begin{cases} -1 & \text{if } a_{nf} > 0 \\ a_{np} & \text{otherwise} \end{cases}$
ER5 _a	$a_{ef} - \frac{a_{ef}}{a_{ep}+a_{np}+1}$	$a_{kf} - \frac{a_{kf}}{a_{kp}+a_{np}+1}$
ER5 _c	$\begin{cases} 0 & \text{if } a_{ef} < F \\ 1 & \text{otherwise} \end{cases}$	$\begin{cases} 0 & \text{if } a_{kf} < F \\ 1 & \text{otherwise} \end{cases}$
AMPLE	$ \frac{a_{ef}}{F} - \frac{a_{ep}}{P} $	$ \frac{a_{kf}}{F} - \frac{a_{kp}}{P} $
Hamann	$\frac{a_{ef}+a_{np}-a_{ep}-a_{nf}}{P+F}$	$\frac{a_{kf}+a_{np}-a_{kp}-a_{nf}}{P+F}$
Dice	$\frac{2a_{ef}}{a_{ef}+a_{ep}+a_{nf}}$	$\frac{2a_{kf}}{a_{kf}+a_{kp}+a_{nf}}$
M1	$\frac{a_{ef}+a_{np}}{a_{nf}+a_{ep}}$	$\frac{a_{kf}+a_{np}}{a_{nf}+a_{kp}}$
M2	$\frac{a_{ef}}{a_{ef}+a_{np}+2a_{nf}+2a_{ep}}$	$\frac{a_{kf}}{a_{kf}+a_{np}+2a_{nf}+2a_{kp}}$
Hamming	$a_{ef} + a_{np}$	$a_{kf} + a_{np}$
Goodman	$\frac{2a_{ef}-a_{nf}-a_{ep}}{2a_{ef}+a_{nf}+a_{ep}}$	$\frac{2a_{kf}-a_{nf}-a_{kp}}{2a_{kf}+a_{nf}+a_{kp}}$
Euclid	$\sqrt{a_{ef} + a_{np}}$	$\sqrt{a_{kf} + a_{np}}$
Wong1	a_{ef}	a_{kf}
Wong2	$a_{ef} - a_{ep}$	$a_{kf} - a_{kp}$
Wong3	$a_{ef} - h, h = \begin{cases} a_{ep} & \text{if } a_{ep} \leq 2 \\ 2 + 0.1(a_{ep} - 2) & \text{if } 2 < a_{ep} \leq 10 \\ 2.8 + 0.001(a_{ep} - 10) & \text{if } a_{ep} > 10 \end{cases}$	$a_{kf} - h, h = \begin{cases} a_{kp} & \text{if } a_{kp} \leq 2 \\ 2 + 0.1(a_{kp} - 2) & \text{if } 2 < a_{kp} \leq 10 \\ 2.8 + 0.001(a_{kp} - 10) & \text{if } a_{kp} > 10 \end{cases}$
Ochiai2	$\frac{a_{ef}a_{np}}{\sqrt{(a_{ef}+a_{ep})(a_{nf}+a_{np})(a_{ef}+a_{nf})(a_{ep}+a_{np})}}$	$\frac{a_{kf}a_{np}}{\sqrt{(a_{kf}+a_{kp})(a_{nf}+a_{np})(a_{kf}+a_{nf})(a_{kp}+a_{np})}}$
Zoltar	$\frac{a_{ef}}{a_{ef}+a_{ep}+a_{nf} + \frac{10000a_{nf}a_{ep}}{a_{ef}}}$	$\frac{a_{kf}}{a_{kf}+a_{kp}+a_{nf} + \frac{10000a_{nf}a_{kp}}{a_{kf}}}$
ER1 _b	$a_{ef} - \frac{a_{ep}}{a_{ep}+a_{np}+1}$	$a_{kf} - \frac{a_{kp}}{a_{kp}+a_{np}+1}$
ER5 _b	$\frac{a_{ef}}{a_{ef}+a_{nf}+a_{ep}+a_{np}}$	$\frac{a_{kf}}{a_{kf}+a_{nf}+a_{kp}+a_{np}}$
GP ₂	$2(a_{ef} + \sqrt{a_{np}}) + \sqrt{a_{ep}}$	$2(a_{kf} + \sqrt{a_{np}}) + \sqrt{a_{kp}}$
GP ₃	$\sqrt{ a_{ef}^2 - \sqrt{a_{ep}} }$	$\sqrt{ a_{kf}^2 - \sqrt{a_{kp}} }$
GP ₁₃	$a_{ef}(1 + \frac{1}{2a_{ep}+a_{ef}})$	$a_{kf}(1 + \frac{1}{2a_{kp}+a_{kf}})$
GP ₁₉	$a_{ef}\sqrt{ a_{ep} - a_{ef} + a_{nf} + a_{np} }$	$a_{kf}\sqrt{ a_{kp} - a_{kf} + a_{nf} + a_{np} }$
RusselRao	$\frac{a_{ef}}{a_{ep}+a_{ef}+a_{np}+a_{nf}}$	$\frac{a_{kf}}{a_{kp}+a_{kf}+a_{np}+a_{nf}}$
SorensenDice	$\frac{2a_{ef}}{2a_{ef}+a_{ep}+a_{nf}}$	$\frac{2a_{kf}}{2a_{kf}+a_{kp}+a_{nf}}$
Kulczynski1	$\frac{a_{ef}}{a_{nf}+a_{ep}}$	$\frac{a_{kf}}{a_{nf}+a_{kp}}$
Kulczynski2	$\frac{1}{2}(\frac{a_{ef}}{a_{ef}+a_{nf}} + \frac{a_{ef}}{a_{ef}+a_{ep}})$	$\frac{1}{2}(\frac{a_{kf}}{a_{kf}+a_{nf}} + \frac{a_{kf}}{a_{kf}+a_{kp}})$
SimpleMatching	$\frac{a_{ef}+a_{np}}{a_{ep}+a_{ef}+a_{np}+a_{nf}}$	$\frac{a_{kf}+a_{np}}{a_{kp}+a_{kf}+a_{np}+a_{nf}}$
RogersTanimoto	$\frac{a_{ef}+a_{np}}{a_{ef}+a_{np}+2a_{nf}+2a_{ep}}$	$\frac{a_{kf}+a_{np}}{a_{kf}+a_{np}+2a_{nf}+2a_{kp}}$
Sokal	$\frac{2a_{ef}+2a_{np}}{2a_{ef}+2a_{np}+a_{nf}+a_{ep}}$	$\frac{2a_{kf}+2a_{np}}{2a_{kf}+2a_{np}+a_{nf}+a_{kp}}$
Anderberg	$\frac{a_{ef}}{a_{ef}+2a_{ep}+2a_{nf}}$	$\frac{a_{kf}}{a_{kf}+2a_{kp}+2a_{nf}}$