Statistics

$$B(x|a,b) = \frac{1}{B(a,b)}x^{a-1}(1-x)^{b-1}$$

$$\mathbb{E}x = \frac{a}{a+b}$$

$$\operatorname{Mode}[x] = \frac{a-1}{a+b-2}$$

$$\operatorname{Var}[x] = \frac{ab}{(a+b)^2(a+b-1)}$$

