

Table S1. Phytotherapeutics for the treatment of benign prostatic hyperplasia and their mechanism of action.

Plant Species	Postulated mechanism of action	References
<i>Serenoa repens</i> (saw palmetto)	<ul style="list-style-type: none">• 5α-reductase inhibition• decrease of DHT level (Inhibiting its binding to androgen receptors)• inhibits DHT and some testosterone metabolites formation• anti-inflammatory activity• anti-proliferative activity• spasmolytic effects• α1-adrenoceptors antagonism	[1,2]
<i>Cucurbita pepo</i>	<ul style="list-style-type: none">• Decrease of DHT level (Inhibiting its binding to androgen receptors)• 5α-reductase inhibition• Inhibition of testosterone-induced hypertrophy	[3,4]
<i>Prunus africana</i>	<ul style="list-style-type: none">• Anti-inflammatory activity• anti-proliferative activity• pro-apoptotic activity• Inhibition of estrogen receptors, progesterone and androgen receptors.	[5–7]
<i>Urtica dioica</i>	<ul style="list-style-type: none">• Anti-proliferative activity• anti-inflammatory activity• Inhibits TNF activity• Inhibits the connecting of SGBG• Stimulates T-lymphocytes activity and the complement activation	[8–11]
<i>Secale cereale</i>	<ul style="list-style-type: none">• Anti-inflammatory activity-decreased IL-6 and TNF-α cytokines levels• pro-apoptotic activity• α-adrenergic receptors block• spasmolytic activity• 5α-reductase inhibition• Decreased PSA expression and androgen receptor	[12–14]

DHT = dihydrotestosterone; TNF = tumor necrosis factor; SGBG = sex hormone binding globulin; IL = interleukin; PSA = prostate-specific antigen

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