

Supplementary Table 3: Study parameters and suggested mechanism (s) of the included topical administration of herb and their active constituents' studies

Herb Name	Sample Type	Experimental Outcomes	Proposed mechanism	References
<i>Isodon inflexus</i> (Thunb.) Kudo	Ethanollic extract (Dried whole plant)	↓dermatitis severity ↓scratching, ↓histamine ↓ear swelling, ↓epidermal thickness, ↓serotonin ↓serum IgE, ↓CORT ↓IFN- γ , ↓NF- κ B, ↓TNF- α ↓macrophage activation i.e., CD68 & Iba1 ↓mast cell count	Attenuation of increase stress levels and depression-related hormones via glucocorticoid-related mechanisms	(112)
<i>Gardenia jasminoides</i> J. Ellis	Ethanollic extract (Dried whole plant)	↓scratching, ↓dermatitis severity ↓ear thickness, ↑epidermal thickness ↓mast cell count ↓IL-4, ↓IL-5, ↓IL-13, ↓TNF- α ↑skin barrier proteins (involucrin & loricrin)	Restoration of skin barrier function and suppression of Th2 cytokines Analysis on signaling pathway was not performed	(111)
<i>Morus alba</i> L.	Ethanollic extract (Dried whole plant)	↓AD-like symptoms, ↓dermatitis severity ↓cellular infiltration, ↓epidermal hyperplasia ↓plasma IgE, ↓plasma histamine	Suppression of TARC production via inhibition of NO and PGE ₂ (<i>in vitro</i>) Analysis on signaling pathway was not performed	(85)
<i>Artemisia capillaris</i> Thunb.	Ethanollic extract (Dried whole plant)	↓AD-like symptoms ↓dermatitis severity ↓mast cell count ↓plasma IgE, ↓plasma histamine	Reduction of histamine by inhibiting IgE-mediated mast cell degranulation Analysis on signaling pathway was not performed	(31)
<i>Saxifraga stolonifera</i> (L) Meeb (Saxifragaceae)	Ethanollic extract (Dried whole plant)	↓ear thickness, ↓epidermal thickness ↓auricle swelling	Suppression of Th2 cytokines and promotion of Th1 cytokines	(143)

		<p>↓eosinophils, ↓mast cell count, ↓IL-4, ↓IL-6 ↓immune organ weight (thymus & spleen) ↑TNF-α & ↑IL-2 No significant changes of IFN-γ</p>	Analysis on signaling pathway was not performed	
<i>Spirodela polyrhiza</i> (L.) Schleid.	Ethanollic extract (Leaves)	<p>↓mast cell count ↓serum IgE, ↓IL-4, ↓IL-6, ↓TNF-α ↑epidermal and dermal hyperplasia ↓NF-κB, ↓IκBα, ↓MAP kinase</p>	Suppression of pro-inflammatory mediators via inhibition of MAPK and NF- κ B signalling pathways	(77)
<i>Alpinia Intermedia</i> Gagnep	Ethanollic extract (Leaves)	<p>↓AD-like symptoms ↓dermatitis severity ↓TEWL, ↓scratching ↓mast cell degranulation</p>	Abrogation of itch sensation and inhibition of mast cell degranulation	(2)
<i>Pyrus ussuriensis</i> Maxim.	Ethanollic extract (Leaves)	<p>↓TEWL, ↑skin hydration ↓erythema, ↓scratching, ↓hypertrophy ↓AD-like symptoms, ↓dermatitis severity ↓serum IgE, ↓cellular infiltration</p>	Suppression of pro-inflammatory cytokines Analysis on signalling pathway was not performed	(17)
<i>Pyrus ussuriensis</i> Maxim.	Ethanollic Extract (Leaves)	<p>↓TEWL, ↓AD-like symptoms, ↓scratching, ↓dermatitis severity, ↓epidermal thickness ↓serum IgE, ↓IL-1β ↓mast cell count, ↓cellular infiltration ↑skin barrier proteins (filaggrin & involucrin)</p>	Restoration of skin barrier function & improvement in skin hydration Analysis on signalling pathway was not performed	(16)
<i>Urtica thunbergiana</i> Siebold & Zucc.	Ethanollic extract (Leaves)	<p>↓AD-like symptoms, ↓TEWL ↓spleen weight, ↓scratching, ↓epidermal thickness ↑skin hydration, ↓erythema index, ↑filaggrin ↓mast cell count, ↓serum IgE ↓MAPKs phosphorylation (p38, ERK), ↑IκBα ↓NFATc1 phosphorylation</p>	Suppression of MAPK/NF- κ B signalling pathways	(100)

<i>Broussonetia kazinoki</i> Siebold	Ethanollic extract (Leaves)	<p>↓AD-like symptoms, ↓dermatitis score ↓dermal thickness, ↓epidermal thickness ↓mast cell count ↓serum IgE, ↓IL-4</p>	<p>Inhibition of Th2 response via suppression of TARC and MDC binding to CCR4</p> <p>Analysis on signaling pathway was not performed</p>	(76)
<i>Wikstroemia indica</i> (L.) C.A. Mey.	Ethanollic extract (Stem & Leaves)	<p>↓AD-like symptoms, ↓epidermal thickness ↑skin hydration, ↓TEWL ↓mast cell count ↓serum IgE, ↓IL-4</p>	<p>Inhibition of IL-4 over expression</p> <p>Analysis on signaling pathway was not performed</p>	(83)
<i>Angelica sinensis</i> (Oliv.) Diels	Ethanollic extract (Roots)	<p>↓epidermal & dermal thickness, ↓mast cell count, ↓scratching ↓serum IgE, ↓substance P ↓IL-4, ↓IL-6, ↓TNF-α, ↓IFN-γ ↓NF-κB, ↓p-IκBα ↓MAPKs phosphorylation (p38, ERK & JNK)</p>	<p>Suppression of Th1 & Th2 cytokines and down-regulation of substance P</p>	(78)
<i>Inula helenium</i> L.	Ethanollic extract (Roots)	<p>↓dermatitis score, ↓right ear swelling ↓epidermal thickness, ↓dermal thickness ↓cellular infiltration ↓serum IgE, ↓TNF-α, ↓IFN-γ ↓IL-4, ↓IL-5, ↓IL-13</p>	<p>Down-regulation of Th1/Th2 -associated cytokines</p> <p>Analysis on signaling pathway was not performed</p>	(134)
<i>Tribulus terrestris</i> L.	Ethanollic extract (Fruits)	<p>↓AD-like symptoms, ↓TEWL ↓dermatitis severity ↓eosinophil & ↓mast cell count ↓Orai-1 channel</p>	<p>Modulation of calcium ion channel and suppression of mast cell count</p>	(57)
<i>Juniperus rigida</i> Siebold & Zucc.	Ethanollic extract (Fruits)	<p>↓TEWL, ↓AD-like symptoms ↓lymphocyte infiltration, ↑ skin hydration ↓ear thickness, ↓epidermal thickness ↓serum IgE & IL-4</p>	<p>Restoration of skin barrier function and suppression of serum IgE and IL-4 production</p> <p>Analysis on signaling pathway was not performed</p>	(82)

<i>Gardenia jasminoides</i> J. Ellis	Ethanollic extract (Fruits)	<p>↓dermatitis severity, ↓ear thickness</p> <p>↓epidermal thickness, ↓histamine, ↓total IgE</p> <p>↓mast cell count</p> <p>↓serum IL-4, ↓IL-6, ↓TNF-α</p> <p>↓ICAM-1, ↓VCAM-1</p>	<p>Suppression in the production of pro-inflammatory cytokines & expression of adhesion molecules</p> <p>Analysis on signalling pathway was not performed</p>	(125)
<i>Forsythia Suspensa</i> (Thunb.) Vahl	Ethanollic extract (Fruits)	<p>↓AD-like symptoms</p> <p>↓dermatitis severity</p> <p>↓ear thickness, ↓epidermal thickness, ↓serum IgE</p> <p>↓mast cell count</p> <p>↓mRNA IL-4, IFN-γ</p>	<p>Suppression of Th2 response, down-regulation of IgE-mediated mast cell activation</p> <p>Analysis on signalling pathway was not performed</p>	(124)
<i>Dioscorea quinqueloba</i> Thunb.	Ethanollic extract (Rhizomes)	<p>↓ear swelling, ↓lymphocyte infiltration</p> <p>↓ear thickness, ↓epidermal thickness</p> <p>↓serum IgE, ↓IL-4, ↓TEWL</p> <p>↓skin surface pH, ↓epidermal hyperplasia</p>	<p>Suppression of serum IgE & Th2 cytokine</p> <p>Analysis on signalling pathway was not performed</p>	(48)
<i>Coptis chinensis</i> Franch.	Ethanollic extract (Rhizomes)	<p>↓scratching, ↓spleen weight</p> <p>↓AD-like symptoms, ↓dermatitis severity</p> <p>↓skin thickness, ↓serum IgE, ↓IL-4</p>	<p>Inhibition of apoptosis of keratinocytes by reducing key protein expressions (<i>in vitro</i>)</p> <p>Analysis on signalling pathway was not performed</p>	(137)
<i>Pterocarpus santalinus</i> L.f.	Ethanollic extract (Bark)	<p>↓epidermal thickness, ↓TEWL</p> <p>↓skin hypertrophy, ↓eosinophil</p> <p>↓mast cell count, ↓serum IgE, ↑serum IgG2a</p> <p>↓TNF-α, ↓IL-4, ↓PGE₂</p>	<p>Regulation of serum levels of IgE and IgG2a, along with suppression of Th1 and Th2 cytokines</p> <p>Analysis on signaling pathway was not performed</p>	(33)

<i>Stellera chamaejasme</i> L.	Ethanollic extract (Dried aerial parts)	↓AD-like symptoms, ↑skin hydration, ↓TEWL ↑lymphocyte infiltration ↓ear thickness, ↓epidermal thickness ↑mast cell count, ↓mast cell degranulation ↓serum IgE, ↓IL-4	Restoration of skin barrier function and inhibition of IL-4 expression Analysis on signaling pathway was not performed	(52)
<i>Centella asiatica</i> (L.) Urb.	Ethanollic extract (Dried aerial parts)	↓lymph node weight, ↓AD-like symptoms ↓ear thickness, ↓epidermal thickness ↓serum IgE, ↓IL-4, ↓IL-13 ↓TNF- α , ↓IL-1 β , ↓COX-2, ↓iNOS, ↓p50/p65 translocation	Suppression of pro-inflammatory mediators via inhibition of NF- κ B signaling pathway	(44)
<i>Quercus mongolica</i> subsp. <i>crispula</i> (Blume) Menitsky	Ethanollic extract (Acorn shell)	↓AD-like symptoms, ↑skin hydration, ↓TEWL ↓ear thickness, ↓epidermal thickness ↓mast cell count, ↓eosinophil infiltration ↓serum IgE, ↓IL-4 ↓ mRNA IL-25, ↓IL-33, ↓TNF- α , ↓IL-1 β	Down-regulation of serum IgE levels and inhibition of mRNA gene expression of Th2-type cytokines Analysis on signalling pathway was not performed	(81)
<i>Cucumis melo</i> L.	Ethanollic extract (Fruit pulp)	↓AD-like symptoms, ↓dermatitis severity ↓epidermal hyperplasia ↓mast cell count ↓plasma IgE, ↓plasma histamine	Suppression of IgE Detailed analysis on signalling pathway was not performed	(32)
<i>Panax ginseng</i> C.A. Mey.	Methanollic Extract (N/A)	↓P-p70S6K ↓p-mTOR	Inhibition of p70S6K phosphorylation in infiltrating basophils	(104)
<i>Acer tegmentosum</i> Maxim.	Methanollic extract (Bark)	↓dermatitis severity ↓dermal thickness, ↓epidermal thickness ↓dermal mast cells count, ↓IL-4, ↓IL-5, ↓IL-13 ↓serum IgE, ↓TARC ↓TSLP (mRNA expression & production)	Restoration of Th1/Th2 balance by reducing TSLP production Analysis on signaling pathway was not performed	(140)
<i>Cyperus rotundus</i> L.	Methanollic extract (Rhizomes)	↓dermatitis severity, ↓epidermal thickness ↓cellular infiltration, ↓hyperkeratosis	Restoration of skin barrier function, inhibition of IgE and	(142)

		<p>↓scratching, ↑filaggrin, ↓Serum IgE ↓IL-6, ↓IL-1β, ↓IL-13</p>	<p>pro-inflammatory cytokine production</p> <p>Analysis on signaling pathway was not performed</p>	
<i>Persicaria tinctoria</i> (Aiton) Spach	Distilled water extract (Dried whole plant)	<p>↓AD-like symptoms, ↓epidermal thickness ↓scratching ↓cellular infiltration ↓TSLP, ↓histamine ↓serum IgE, ↓IL-4, ↓IL-6</p>	<p>Blockade of caspase- 1/receptor-interacting protein 2 pathway in stimulated mast cells</p>	(38)
<i>Vincetoxicum atratum</i> (Bunge) C. Morren & Decne.	Distilled water extract (Roots)	<p>↓scratching ↓epidermal & dermal thickness, ↓serum IgE, ↓skin mast cell ↓IL-4, ↓IL-6, ↓TNF-α, ↓IL-1β ↓NF-κB, ↓IκBα, ↓MAPK</p>	<p>Suppression of pro- inflammatory mediators and Th2 response via inhibition MAPK and NF-κB signaling pathways</p>	(23)
<i>Pseudostellaria heterophylla</i> (Miq.) Pax	Distilled water extract (Roots)	<p>↓dermal thickness, ↓epidermal thickness ↓mast cell count, ↓serum IgE, ↓CD4⁺ T-cell recruitment ↓IL-4, ↓IL-6, ↓IL-8 ↓IL-1β, ↓TNF-α, ↓IFN-γ ↓p-IκBα, ↓p-JNK, ↓p-ERK1/2, ↓p-p38</p>	<p>Suppression of MAPK/NF-κB signaling pathways</p>	(21)
<i>Rosa multiflora</i> Thunb.	Acetone extract (Roots)	<p>↓AD-like symptoms ↓dermatitis severity ↓iNOS, ↓COX-2, ↓eosinophil ratio ↓serum IgE, ↑IL-10 ↓IL-4, ↓IL-5, ↓IL-13</p>	<p>Suppression of Th2 response via activation of Treg</p> <p>Analysis on signaling pathway was not performed</p>	(110)
C2RLP				
<ul style="list-style-type: none"> • <i>Rosa multiflora</i> Thunb. • <i>Lespedeza bicolor</i> Turcz. • <i>Platycladus orientalis</i> (L.) Franco 	Mixture (Ethanollic extracts)	<p>↓dermatitis severity, ↓cellular infiltration ↓epidermal hyperplasia ↓IL-4, ↓nitrite (NO), ↓PGE2, ↓TARC</p>	<p>Suppression of Th2 cytokines and pro- inflammatory mediators</p>	(92)

<ul style="list-style-type: none"> • <i>Castanea crenata</i> Siebold & Zucc. • <i>Cornus officinalis</i> Siebold & Zucc. 				
<p>Dangguibohyul-Tang</p> <ul style="list-style-type: none"> • <i>Astragalus mongholicus</i> Bunge • <i>Angelica sinensis</i> (Oliv.) Diels 	Mixture (Ethanollic extracts)	<p>↓AD-like symptoms, ↓scratching ↓dermal thickness, ↓epidermal thickness ↓mast cell count, ↓serum IgE ↓IL-4, ↓IL-6, ↓IL-1β, ↓TNF-α, ↓IFN-γ ↓NF-κB, ↓p- IκBα ↓MAPKs phosphorylation (p38, ERK & JNK)</p>	Suppression of both Th1 & Th2 cytokine production via the inhibition of MAPK and NF-κB signalling pathways	(22)
<p>Danggui Buxue Tang</p> <ul style="list-style-type: none"> • <i>Astragalus mongholicus</i> Bunge • <i>Angelica sinensis</i> (Oliv.) Diels 	Mixture (Ethanollic extracts)	<p>↓AD-like symptoms, ↓ear swelling ↓epidermal thickness, ↓eosinophil infiltration ↓mast cell count, ↓serum IgE, ↓IgG1 ↓IL-4, ↓TNF-α</p>	Suppression of Th1 & Th2 cytokines Analysis on signalling pathway was not performed	(28)
<p>KAJD</p> <ul style="list-style-type: none"> • <i>Phellodendron amurense</i> Rupr. • <i>Sesamum indicum</i> L. • <i>Sophora flavescens</i> Aiton • <i>Glycyrrhiza glabra</i> L. • <i>Ophiopogon japonicus</i> (Thunb.) Ker Gawl. • <i>Radix rehmanniae</i> Exsiccat 	Mixture (Water extracts)	<p>↓AD-like symptoms, ↓CD4⁺ T-cell recruitment ↓mast cell count, ↓eosinophil count ↓serum IgE ↓IL-6, ↓IL-10, ↓IL-12</p>	Suppression of Th2 response by controlling transcriptional expression of cytokines Analysis on signalling pathway was not performed	(42)

<p>Pentaherbs</p> <ul style="list-style-type: none"> • <i>Lonicera japonica</i> Thunb. • <i>Mentha canadensis</i> L. • <i>Paeonia</i> × <i>suffruticosa</i> Andrews • <i>Atractylodes lancea</i> (Thunb.) DC. • <i>Phellodendron amurense</i> Rupr. 	<p>Mixture (Water extracts)</p>	<p>↓ear redness, ↓ear swelling (only ORAL) ↓epidermal thickness, ↓eosinophil infiltration ↓mast cell count ↓serum IL-5, ↓IL-12</p>	<p>Inhibition of pro-inflammatory cytokine production, IL-12 & eosinophil activator, IL-5</p> <p>Analysis on signalling pathway was not performed</p>	<p>(131)</p>
<p>Huang-Lian-Jie-Du-Tang (HLJDT)</p> <ul style="list-style-type: none"> • <i>Coptis chinensis</i> Franch • <i>Scutellaria baicalensis</i> Georgi • <i>Phellodendron amurense</i> Rupr. • <i>Gardenia jasminoides</i> J Ellis 	<p>Mixture (Water extracts)</p>	<p>↓AD-like symptoms, ↓cellular infiltration ↓ear swelling, ↓hyperkeratosis ↓IL-2, ↓IL-4, ↓IL-5, ↓IL-6 ↓IL-1α, ↓IL-1β, ↓NF-κB ↓IκB-α, ↓IFN-γ, ↓TNF-α ↓CD4⁺/CD8⁺ T-lymphocyte ratio ↓MAPKs phosphorylation (p38, ERK & JNK)</p>	<p>Suppression of pro-inflammatory mediators via inhibition of MAPKs, IκB-α & NF-κB signalling pathways</p>	<p>(27)</p>
<p>Si-Ni-San</p> <ul style="list-style-type: none"> • <i>Bupleurum chinense</i> DC. • <i>Paeonia lactiflora</i> Pall. • <i>Glycyrrhiza uralensis</i> Fisch. ex DC. • <i>Citrus aurantium</i> L. 	<p>Mixture (Water extracts)</p>	<p>↓AD-like symptoms, ↓cellular infiltration ↓IL-2, ↓IL-4, ↓IL-6 ↓IL-1α, ↓IL-1β, ↓TNF-α ↓CD4⁺/CD8⁺ T-lymphocyte ratio, ↓epidermal hyperplasia, ↓IκB-α, ↓NF-κB ↓MAPKs phosphorylation (p38, ERK & JNK)</p>	<p>Suppression of MAPKs signalling pathway activation</p>	<p>(26)</p>
<p>Atofreillage</p>		<p>↓dermal thickness, ↓epidermal thickness</p>	<p>Regulation of IgE and histamine production</p>	<p>(67)</p>

<ul style="list-style-type: none"> • <i>Rhus javanica</i> Linne • <i>Kochi scoparia</i> Schrader • <i>Cnidium monnieri</i> (L.) Cusson • <i>Houttuynia cordata</i> Thunb. • <i>Nepeta tenuifolia</i> Benth. • <i>Sophora flavescens</i> Aiton • <i>Rheum palmatum</i> L. • <i>Lithospermum erythrorhizon</i> Siebold & Zucc. • <i>Terminalia chebula</i> Retz. • <i>Trichosanthes kirilowii</i> Maxim. 	Mixture (Distilled water extracts)	<p>↓mast cell count, ↓leukocyte count</p> <p>↓serum IgE, ↓serum histamine</p> <p>↓IL-4, ↓IL-5, ↓IL-13</p> <p>↓IL-6, ↓IL-1β, ↓TNF-α, ↓NF-κB</p> <p>↓MAPKs phosphorylation (p38, ERK & JNK)</p>	by inhibition of Th2 response via MAPK and NF-κB signalling pathways
--	------------------------------------	---	--

<ul style="list-style-type: none"> • <i>Aucklandia costus</i> Falc. • <i>Platycladus orientalis</i> (L.) Franco 	Mixture (1,3-butylene glycol extracts)	<p>↓AD-like symptoms</p> <p>↓dermis thickness</p> <p>↓epidermal thickness</p> <p>↓eosinophil,</p> <p>↓mast cell count</p> <p>↓serum IgE, ↓IL-4, ↓IL-13</p> <p>↓ mRNA TNF- α & ↓IFN- γ</p>	<p><u>SC</u>: Suppression of IFN- γ & TNF- α activation by inhibiting STAT1 phosphorylation</p> <p><u>TOL</u>: Suppression of pro-inflammatory cytokines mainly TNF- α and IL-1β</p> <p>Detailed analysis on signalling pathway was not performed</p>	(141)
---	--	---	---	-------

<p>Jawoongo</p> <ul style="list-style-type: none"> • <i>Arnebia euchroma</i> (Royle ex Benth.) I.M. Johnst. • <i>Angelica gigas</i> Nakai 	<p>Mixture (N/A)</p>	<p>↓skin thickness, ↓WBCs ↓mast cell count ↓serum IgE, ↓IL-6, ↓IL-10, ↓IL-12, ↓IL-2, ↓IL-4, ↓IL-13, ↓TNF-α</p>	<p>Down-regulation of serum IgE levels and suppression of Th1 & Th2 cytokines</p> <p>Analysis on signalling pathway was not performed</p>	<p>(70)</p>
<p><i>Stewartia pseudocamellia</i> Maxim.</p>	<p>5,6-dihydroergosterol-glucoside (isolated compound)</p>	<p>↓lymph node weight, ↓spleen weight ↓AD-like symptoms, ↓epidermal thickness ↓eosinophil, ↓mast cell count ↓CCL17, ↓CCL22 ↓histamine, ↓total IgE</p>	<p>Suppression in the production of Th2 chemokines</p> <p>Analysis on signalling pathway was not performed</p>	<p>(55)</p>
<p><i>Ophiopogon japonicus</i> (Thunb.) Ker Gawl.</p>	<p>Ophiopogonin D (isolated compound)</p>	<p>↓epidermal thickness, ↓spleen weight ↓IL-4, ↓IL-5, ↓IL-13, ↓eotaxin ↓TNF-α, ↓IFN-γ, ↓IL-1β mRNA ↓mast cell count</p>	<p>Suppression of mast cell activation and inhibition of mRNA gene expression of Th2-type cytokines</p> <p>Analysis on signalling pathway was not performed</p>	<p>(4)</p>
<p><i>Fritillaria usuriensis</i> Maxim.</p>	<p>Peiminine (isolated compound)</p>	<p>↓epidermal thickness, ↓dermal thickness ↓eosinophil, ↓mast cell count ↓serum IgE, ↓IL-4, ↓IL-6, ↓IL-13 ↓NF-κB, ↓TNF-α ↓MAPKs phosphorylation (p38, ERK & JNK)</p>	<p>Suppression of pro-inflammatory mediators via inhibition of NF-κB & MAPK signalling pathways</p>	<p>(88)</p>
<p><i>Artemisia scoparia</i> Waldst. et Kitaib</p>	<p>3,5-dicaffeoyl-epi-quinic acid (isolated compound)</p>	<p>↓AD-like symptoms, ↓scratching ↓epidermal thickness ↓mast cell count, ↓eosinophil infiltration ↓serum histamine, ↓serum IgE ↓TNF-α, ↓caspase-1 activation</p>	<p>Regulation of caspase-1 signalling pathways</p>	<p>(115)</p>
<p><i>Blainvillea acmella</i> (L.) Philipson</p>	<p>Spilanthol (isolated compound)</p>	<p>↓ear thickness, ↓collagen deposition ↓mast cell count, ↓eosinophils ↓serum IgE, ↓IgG1, ↑IgG2a ↓MAPK proteins, ↓COX-2, ↓iNOS</p>	<p>Restoration of Th1/Th2 balance, inhibition of MAPK pathway and mast cell infiltration</p>	<p>(46)</p>

Soy isoflavone daidzin	7,8,4'- <i>Trihydroxyisoflavone</i> (isolated compound)	↓AD-like symptoms, ↓dermatitis severity, ↓TEWL ↓ear thickness, ↓epidermal hypertrophy, ↓scratching ↓serum IgE, ↓eosinophil, ↓mast cell count, ↓TARC ↓IL-4, ↓IL-5, ↓IL-13 ↓IL-12, ↓IFN- γ	Suppression of Th1 & Th2 cytokines Analysis on signalling pathway was not performed	(63)
<i>Gardenia jasminoides</i> J. Ellis	Crocin (isolated compound)	↓dermatitis severity, ↓eosinophil ↓mast cell count ↓ear thickness, ↓epidermal thickness, ↓serum IgE ↓IL-4, ↓IL-5, ↓IL-13 ↓TARC, ↓p-STAT6, ↓I κ B α	Suppression of Th2 response via inhibition of NF- κ B /STAT6 signalling pathways	(123)
<i>Stellera chamaejasme</i> L.	Stechamone (isolated compound)	↓stratum corneum thickness ↓dermal thickness, ↓lymphocyte infiltration ↓mast cell count ↓mast cell densities, ↓TEWL ↓serum IgE, ↓IL-4	Inhibition of IL-4 expression, regulation of IgE synthesis and suppression of mast cell degranulation Analysis on signalling pathway was not performed	(52)
<i>Alpinia officinarum</i> Hance	Galangin (isolated compound)	↓dermal thickness, ↓epidermal thickness ↓eosinophil, ↓mast cell count ↓total IgE, ↓DfE-specific IgE, ↓IgG2a ↓IL-4, ↓IL-5, ↓IL-13 ↓IL-31, ↓IL-32, ↓IFN- γ	Suppression of Th1 & Th2 cytokines, with IL-32 as its target Analysis on signalling pathway was not performed	(19)
<i>Artemisia</i> species (Species was not mentioned)	Eupatilin (isolated compound)	↓AD-like symptoms, ↓ear thickness, ↓skin barrier protein expression (filaggrin & loricrin) ↓serum IgE, ↓IL-4, ↑PPAR- α ↓ mRNA TNF- α , ↓IFN- γ , TSLP ↓mRNA IL-25, ↓IL-33, ↓IL-1 β	Suppression of Th2 cytokines & IL-33 mRNA expression Suppression of TARC inflammation via the inhibition of TSLP cytokine expression	(56)

			Analysis on signalling pathway was not performed	
Origin of the herb was not mentioned	Quercetin (compound)	↓epidermal thickness, ↓hyperplasia ↓IL-4, ↓IL-6, ↓CCL17, ↓CCL22 ↓IFN- γ , ↓TNF- α ↓mast cell count	Suppression of Th1 & Th2 cytokines via TLR2 and TLR6 signalling pathway	(45)
<i>Nigella sativa</i> L.	Thymoquinone (isolated oil)	↓ear clinical score (dermatitis severity) ↓ear thickness & weight ↓total leukocyte count ↓serum IgE ↓mRNA IL-4, IL-5 & IFN- γ	Suppression of both Th1 & Th2 cytokines Analysis on signalling pathway was not performed	(5)
<i>Labiatae</i> or mint family	(R)- (+)-Pulegone (isolated oil)	↓AD-like symptoms, ↓scratching ↓dermal thickness, ↓epidermal thickness ↓mast cell count, ↓total IgE, ↓nerve growth factor ↓IL-4, ↓IL-6, ↓IL-1 β , ↓TNF- α , ↓IFN- γ ↓MAPKs phosphorylation (p38, ERK & JNK) ↓p- I κ B α / I κ B α ratio	Suppression MAPK/NF- κ B signalling pathways and cytokine production	(24)

N/A: Part of the plant or type of extract was not mentioned