Online Supplementary Materials

Table 1. Some of the commonly used edible medicinal plants and their antiviral inhibiting effects against coronaviruses and sibling respiratory syndromes.

Scientific name (Common name)	Experimental settings	Antiviral phytochemicals	Against	Mode of action
Allium sativum (Garlic)	*In vitro*/Peeled garlic/ cytopathicity (CPE)-based assay/Real-time RT-PCR	Allicin	SARS-CoV	Inhibits proteolytic and hemagglutinating activity and viral replication[22]
	Molecular docking analysis	-	SARS-CoV-2	Potential inhibitor of the main protease of SARS-CoV-2 (potential inhibitor for replication of the virus)[23]
	Molecular docking study[23] and Peeled garlic/ *in vitro*/ A hydrodistillation clevenger apparatus/ Gas Chromatography−Mass Spectrometry (GC−MS) Analysis[24]	Allyl disulfide and Allyltrisulfide	SARS-CoV-2	Inhibit the ACE2 receptor and main protease of SARS-CoV-2[23,24]

	Peeled garlic/*in vitro*/A hydrodistillation clevenger apparatus/Gas Chromatography−Mass Spectrometry (GC−MS) Analysis[24] and *in vitro*/molecular docking, SPR (Surface plasmon resonance)/FRET (fluorescence resonance energy transfer)-based bioassays, and mutagenesis studies[25]	Quercetin	SARS-CoV, SARS-CoV-2	The inhibition activity of 3CL^{Pro} inhibits the connection of the cells by inhibiting the ACE2 enzymes[24,25]
Zingiber officinalis (Ginger)	Molecular docking study	6-gingerol	SARS-CoV-2	Inhibition of viral proteases, RNA binding protein, spike protein[26]
	Molecular docking study	6-Shogaol	SARS-CoV-2	Inhibits Mpro and S protein of SARS-CoV-2[27]
Nigella sativa (Black cumin)	Review works	Nigellimine, thymoquinone dithymoquinone, thymohydroquinone	SARS-CoV-2	Block the SARS-CoV-2 entry via angiotensin-converting enzyme 2 (ACE2) in

				pneumocytes[28, 29]
	Molecular docking study	Nigellidine and α-hederin	SARS-CoV-2	Inhibit main protease (Mpro)[30]
Allium cepa (Onion)	*In vitro*/molecular docking, SPR (Surface plasmon resonance)/FRET (fluorescence resonance energy transfer)-based bioassays, and mutagenesis studies	Quercetin	SARS-CoV	Inhibits Mpro protein, inhibits 3CLpro, and interacts with viral HA protein to inhibit virus entry into the cell and inhibit SARS-CoV 3CLpro or viral replication[25]
	Molecular docking study	Kaempferol	SARS-CoV-2	Inhibit main protease (Mpro)[23]
Curcuma longa (Turmeric)	Molecular docking study	Curcumin	SARS-CoV	Inhibit protease enzyme, inhibit COVID-19 Mpro protein[23]
	In vitro/cell-based cytopathogenic effect (CPE) assay on Vero E6 Cells/ethyl acetate extracts/heartwood			Inhibits 3CLpro[31]
Cinnamomum cassia	*In vitro*/dried medicinal herbs and four fractionated samples of	Plant extracts	SARS-CoV	Inhibitor of 3CLpro[32]

*(*Chinese cinnamon)	Cinnamomi Cortex (CC) and Caryophylli Flos (CF)/ centrifugation followed by concentration under reduced pressure			
Camellia sinensis (Green tea)	*In vitro*/Endonuclease assays of the influenza A RNA polymerase PA subunit/docking simulation/leaves	Catechins	AIV (Avian Influenza Virus)	Suppress the RNA synthesis by inhibiting the endonuclease activity of AIV RNA polymerase[33]
	Bioinformatic analysis	Myricetin 3-Obeta-Dglucopyranoside	SARS-CoV-2	Inhibits SARS-CoV-2 3CLpro[34]
	A nanoparticle-based RNA oligonucleotide biochip		SARS-CoV	Inhibitors of SARS-CoV N protein[35]
	Molecular docking study	Kaempferol	SARS-CoV-2	Inhibits Mpro and S protein of SARS-CoV-2[27]
	Molecular docking study	Theaflavin	SARS-CoV-2	Inhibits RdRp (RNA dependent RNA polymerase) activity[36]

	In vitro/leaves/water extracts/high-performance liquid chromatography (HPLC) assay	Tannic acid, 3-isotheaflavin- 3-gallate	SARS-CoV	Inhibitor of 3CLpro[37]
Allium porrum (Leek)	Peeled garlic/*in vitro*/ cytopathicity (CPE)-based assay/Real-time RT-PCR	Allium porrum Agglutinin (APA)	SARS-CoV	Inhibition of the virus attachment[22]
Citrus limon (Lemon)	*In vitro*/root/cell-free and cell-based cleavage assays/distilled boiling water	Hesperetin	SARS-CoV	Inhibits 3CLPro protease[38]
	Molecular docking study	Hesperidin	SARS-CoV-2	Inhibition of SARS-Cov-2 Mpro[39]
Linum usitatissimum (Flax)	*In vitro*/cation chromatography/flavonoid library/induced-fit docking study	Herbacetin	MERS-CoV (Middle East respiratory syndrome coronavirus)	Inhibitor of 3CLpro[40]
	In vitro/root tubers/aqueous extract/biotinylated enzyme-linked immunosorbent assay (ELISA)/ Immunofluorescence assay (IFA)[41];	Emodin (6-methyl 1,3,8trihydroxyanthraquino e)	SARS-CoV-2	Blocks the SARS coronavirus spike protein and angiotensin-

	molecyular docing study[42]; *in vitro* and *in vivo*/peel/ aqueous methanol/LC–MS/MS analysis of metabolites[43]			converting enzyme 2[41-43]
Mentha piperita (Mentha)	Molecular docking study	Menthol & hesperidin,	SARS-CoV-2	Antiviral activity inhibits COVID-19 Mpro protein[27]
Glycyrrhiza uralensis (Liquorice root /Licorice)	*In vitro*/neutralization tests/ plaque reduction assays/ high-performance liquid chromatography (HPLC)	Glycyrrhizin	SARS-CoV	Inhibits viral replication[44]
Amaranthus tricolor (Chinese spinach)	Bioinformatic analysis	Amaranthine	SARS-CoV-2	Inhibits SARS-CoV-2 3CLpro[34]
Phaseolus vulgaris (Bean)	Bioinformatic analysis	3,5,7,30,40,50-hexahydroxy flavanone-3-Obeta-Dglucopyranoside	SARS-CoV-2	Inhibits SARS-CoV-2 3CLpro[34]
Brassica oleracea (Broccoli)	Molecular docking study	Kaempferol	SARS-CoV-2	Inhibits Mpro and S protein of SARS-CoV-2[27]