

SUPPLEMENTARY DATA

Table 1: Chinese Traditional Medicine and COVID-19

Herbal Items /Herbal decoctions	Plant(s) of Origin	Part(s) in Use	Ethnomedicinal Use	Use of herbal composition	Anti-Covid-19 Mechanisms	Ref
Qingfei Paidu Herbal Formulation (a decoction of Ma Xing Shi Gan, MSXG; She Gan Ma Huang, SGMH; Xiao Chai Hu, XCH; and Wu Ling San, WLS herbal preparations)						
<i>Herba ephedrae</i> ,	<i>Ephedra sinica</i> Stapf., <i>E. equisetina</i> Bge., <i>E. intermedia</i> Schrenket CA. Mey.	Grass stem	Dyspnea, cough, promote urination	Treatment of common cold, flu, cough fever, and influenza virus in- fections. Damages the viral surface structure and prevents entry.	Direct inhibition of SARS-COV2 cellu- lar adsorption, entry and replication, viral surface structure da- mage and promotion of anti-inflammatory signalling and immu- regulation	(Shi-Ying et al. 2020) (Hsieh et al. 2012) (Ang et al. 2020) (Liu 2020) (Kong et al. 2020) (Liu et al. 2020) (Chen et al. 2020) (Yang et al. 2020) (Wiki 2020)
<i>Radix glycyrrhizae</i> ,	<i>Glycyrrhiza uralensis</i> Fisch., <i>Glycyrrhiza inflata</i> , <i>Glycyrrhiza glabra</i> L.,	Root	Phlegm, cough, dyspnea, pain			
<i>Semen armeniaca</i> <i>amarum</i> ,	<i>Prunus armeniaca</i> L., <i>P. sibirica</i> L. <i>P. mandshurica</i> ,	Seed	Cough, dyspnea, gastroin- testinal disorders			
<i>Gypsum fibrosum</i>	N.A	Stone containing CaSO ₄	Dyspnea and cough			
She Gan Ma Huang decoction (SGMH)						
<i>Herba ephedrae</i> ,	<i>Ephedra sinica</i> , <i>E. intermedia</i> , <i>E. equisetina</i> stem			Treatment of inflamm- atory conditions sore throat, asthma and flu.		
<i>Rhizome pinelliae preparata</i> ,	<i>Pinelliae Rhizoma</i>	Rhizome	Phlegm, cough			
<i>Rhizoma zingiberis recens</i> ,	<i>Zingiber officinale</i> Rosc	Rhizome	Flatulence, nausea			
<i>Radix asteris</i> ,	<i>Aster tataricus</i> L.	root	Cough with phlegm			
<i>Flos farfarae</i> ,	<i>Tussilago farfara</i> L.	flower bud	Airway illness, neurolo- gical disorders			
<i>Rhizoma belamcandae</i> ,	<i>Belamcanda chinensis</i> (L.) DC.	Rhizome	Sore throat, cough, asthma	Common cold, cough, pain		
<i>Herba asari</i> (wild ginger)	<i>Asarum splendens</i>					
Xiao Chai Hu, XCH						
<i>Radix glycyrrhizae</i> ,	<i>Glycyrrhiza uralensis</i> Fisch., <i>Glycyrrhiza</i> <i>inflata</i> Bat. <i>Glycyrrhiza glabra</i> L.,	Root	Phlegm, cough and dyspnea, pain	Treatment of viral infe- ction, cough, cancerous tumors		
<i>Radix bupleuri</i> ,	<i>Bupleurum chinensis</i> DC. or <i>Bupleurum scorzonerifolium</i>	Root	Viral infections, flu, cold			
<i>Radix scutellariae</i> ,	<i>Scutellariae baicalensis</i> Georgi.	Root	Hepatitis, viral infections inflammation, liver disease			
<i>Rhizome pinelliae preparata</i> ,	<i>Pinelliae Rhizoma</i>	Rhizome	Phlegm, cough	flatulence, nausea		
<i>Rhizoma zingiberis recens</i>	<i>Zingiber officinale</i> Rosc	Rhizome				
Wu Ling San (WLS)						
<i>Ramulus cinnamomi</i> ,	<i>Cinnamomum cassia</i> Presl.	Burgeon/bud	Body pain, common cold	Used in the improvement of renal function and treat- ment of inflammatory dis- orders		
<i>Rhizoma alismatis</i> ,	<i>Alisma orientalis</i> (Sam.) Juzep.	Stem tuber	Edema, dysuria, phlegm, dia- rrhea			
<i>Polyporus umbellatus</i> ,	<i>Polyporus umbellatus</i>	Sclerotium	Edema, dysuria, diarrhea			
<i>Rhizoma atractylodis</i> ,	<i>Atractylodes macrocephala</i> Koidz.	Rhizome	Diarrhea, phlegm, edema,	Edema, cold, diuretics		
<i>macrocephalae</i> Poria,	Eumycete Poria cocos (schw)	Sclerotium				

Da Yuan Yin Formulation

<i>Semen arecae</i>	Areca catechu L	Seed	Gastrointestinal disorders, parasitic diseases	Relief of chest congestion	Promotion of anti-inflammatory and immunoregulatory signaling involving various cytokines target and biological processes including the AGE-RAGE signaling pathway implicated in diabetic complications.	(Ruan et al. 2020) (Huan-Tian Cui 2020) (Wiki 2020)
<i>Cortex Magnoliae officinalis</i> ,	Magnolia officinalis Rehd. et Wils	stem/root bark	Stomach disorders, dyspnea, cough	cough, and asthmatic symptoms caused by viral infections. Elimination of pathogens in the pleuro-diaphragmatic interspace.		
<i>Tsaoko Amomum fructus</i> ,	Amomum tsaoko Crevost et Lemaire	Fruit	Abdominal pain, vomiting, Phlegm, malaria			
<i>Rhizoma Anemarrhenae</i> ,	Anemarrhena asphodeloides	Rhizome	Fever, cough, stomach pain, renal diseases			
<i>Rhizoma Dioscoreae</i> ,	Dioscorea opposita Thunb.	Rhizome	Diarrhea, cough, inflammation			
<i>Radix scutellariae</i> ,	Scutellariae baicalensis Georgi.	Root	Hepatitis, viral infections, inflammation, liver diseases			
<i>Glycyrrhizae radix et rhizome</i> ,	<i>Glycyrrhiza uralensis</i> Fisch., <i>Glycyrrhiza inflata</i> , <i>Glycyrrhiza glabra</i> L.,	Rhizome	Phlegm, cough and dyspnea, pain			

Shufeng Jiedu Capsule

<i>Polygonum cuspidatum</i>	<i>Polygonum cuspidatum</i>	Root	Liver diseases, digestive disorders	Treatment of respiratory infections including pulmonary diseases, flu, and common cold. Possesses antiviral, antibacterial, antitumor and anti-inflammatory potencies	Promotion of anti-inflammatory signaling involving various interleukins and mitogen activated protein kinases as well as by immunoregulation	(Dong et al. 2017) (Liu 2020) (Yang et al. 2017) (He et al. 2017) (Huang et al. 2020)
<i>Fructus Forsythiae</i>	<i>Forsythia suspensa</i> (Thunb.) Vahl.	fruits	Heat clearing, detoxification, inflammation			
<i>Radix isatidis</i> ,	<i>Isatis indigotica</i> Fort.	Root	Sore throat, pain, swelling, fever			
<i>Radix bupleuri</i> ,	<i>Bupleurum chinensis</i> DC. or <i>Bupleurum scorzonerifolium</i>	root	Viral infections, flu, cold, inflammation			
<i>Dahurian patrinia herb</i> ,	<i>Patrinia scabiosaeifolia</i> Fisch.	root, whole plant	Heat-clearing, toxicity, pain			
<i>Herba Verbena</i>	European Verbena	stalk with herb	Diuresis, swelling, toxicity			
<i>Rhizoma phragmitis</i>	<i>Phragmites communis</i> (L.) Trin	rhizome	Cough, cold, lung inflammation, diurestics			
Licorice root	<i>Glycyrrhiza uralensis</i> Fisch. , <i>G. inflata</i> Bat.or <i>L. glabra</i> L.	root	Phlegm, cough, dyspnea, spasm, fever, pain,			

Pudilan formulation

<i>Taraxacum mongolicum</i>	<i>Taraxacum mongolicum</i> Hand-Mazz	leaf, root	Inflammation, gastrointestinal disorders	Treatment of acute and chronic inflammation and consequent pathological conditions like pharyngitis, tonsillitis and some respiratory disorders	Inhibition of SARS-CoV-2 replication, anti-SARS-CoV 3CLpro effects, mitigation of pathological damages in lung by attenuating pro-inflammatory mediators including IL-10 and TNF- α	(Kong et al. 2020) (Dong et al. 2015) (Lin et al. 2005) (Liu et al. 2020) (Deng et al. 2020) (Tian et al. 2020)
<i>Corydalis bungeana</i> ,	<i>Corydalis bungeana</i> Turcz.	leaf, whole plant	Inflammation, respiratory infections, tissue toxicity,			
<i>Isatis indigotica</i> ,	<i>Isatis indigotica</i> ,	roots	Inflammation, viral infections, cold, fever, pneumonia			
<i>Scutellaria baicalensis</i>	<i>Scutellariae baicalensis</i> Georgi.	leaf roots,	Hepatitis, viral infections, liver diseases			

Lianhuaqingwen capsule

<i>Lonicera japonica</i>	<i>Lonicera japonica</i> var. <i>japonica</i>	leaf, flower	Fever, cold, headache, inflammation	Treatment of influenza and other viral infections, respiratory disorders and for immune regulation	Antagonizing SARS-CoV-2 spike protein, blocking of virus binding with ACE, inhibition of viral replication, amelioration of respiratory tract injury via anti-oxidant, antiapoptotic mechanisms and suppression of inflammatory mediators
<i>Forsythia suspense</i>	<i>Forsythia suspensa</i> (Thunb.) Vahl.	flower/fruit	Heat-clearing, sore throat, cold		
<i>Pogostemon cablin</i>	<i>Pogostemon cablin</i> (Blanco) Benth.	Shoot part	Nausea, vomiting, diarrhea, gas-inflammation, viral/bacterial diseases cold, cough, pneumonia		
<i>Rhodiola rosea</i>	<i>Rhodiola rosea</i>	bark,	fever, stomach infection, edema		
<i>Radix et Rhizoma Rhei</i>	<i>Rheum palmatum</i> L., <i>R. tanguticum</i> Maxim.ex. Balf., <i>R. officinale</i> Baill	root,			
<i>Herba ephedrae</i> ,	<i>Ephedra sinica</i> Stapf., <i>E. equisetina</i> Bge., <i>E. intermedia</i> Schrenket CA. Mey.	Grass stem	Dyspnea, cough, promote urination		
<i>Radix et Rhizoma glycyrrhizae</i>	<i>Glycyrrhiza uralensis</i> Fisch., <i>Glycyrrhiza inflata</i> , <i>Glycyrrhiza glabra</i> L.,	Root, Rhizome	Phlegm, cough, dyspnea, pain		
<i>Radix isatidis</i> ,	<i>Isatis indigotica</i> Fort.	Root	Sore throat, pain, swelling, fever		
<i>Semen armeniacae amarum</i> ,	<i>Prunus armeniaca</i> L., <i>P. sibirica</i> L.	Seed	Cough, dyspnea, gastrointestinal disorders		
<i>Rhizoma Dryopteridis</i>	<i>P. mandshurica</i> ,				
<i>Crassirhizomatis</i>	<i>Dryopteris crassirhizoma</i> Nakai	Rhizome	Hemorrhage, Menorrhagia, toxicity, fever, common cold		
<i>Herba Houptuyniae</i>	<i>Houttuynia cordata</i> Thunb	Aerial	Fever, abscess, toxicity, sores, cough		

Table 2: Indian Ayurvedic Medicine and COVID-19

Medicinal Plant	Common Name	Part(s) in Use	Ethnomedicinal Indication	Use of herbal composition	Anti-Covid-19 Mechanisms	Ref
Sudarsana Churna herbal composition						
Swertia Chirata 2016)	Chiretta	Whole plant,	Body weakness, pain, fever, cough, asthma, inflammation	Treatment of malaria, cold, fever and associated symptoms like fatigue, anorexia and dyspepsia, as well as viral infections and diabetes.	Not Available	(Kumar and Van Staden)
		Root	mmatory disorders, common cold hypertension, headaches, gastrointestinal disorders			(Bhargava 2008)
<i>Trichosanthes dioica</i> Roxb.	Pointed gourd leaf	Leaf, juice,	Wound, fever, edema, febrifuge, hair loss			(Weerakoon et al. 2018)
<i>Uraria picta</i> (Jacq.) Desv.	Indian Uraria, slight-of-hand herb	leaf	Microbial infection, cough, poison, fever			(Oyesiku et al. 2013)
<i>Legenaria siceraria</i> (Mol) Standl	Bottle gourd	Fruit	Ulcer, fever, asthma, cough diabetes, hyperlipidemia, inflammation, heart and liver diseases, stress			
<i>Naregamia alata</i>	Goanese Ipecacuanh,	Whole plant	Fever, malaria, asthma, throat congestion spleen disease, anemia, emetic			
<i>Piper nigrum</i>	Goanese Ipecac	Fruit	Inflammation, pain, fever, immune dysfunction, spasm, bacterial, fungal infection, anxiolytic, hypertension, cancer			(Damanhour and Ahmad 2014)
<i>Piper longum</i>	Long pepper	Fruit	Constipation, asthma, diarehea, malaria, viral infections, respiratory infections, cough, bronchitis			(Kumar et al. 2011)
<i>Glycyrrhiza glabra</i> L.		Rhizome	Phlegm, cough and dyspnea, pain			
<i>Azadirachta indica</i> A. Juss	Neem	Bark	Asthma, cough, intestinal disorders, wound, phlegm, leprosy			

<i>Inula racemosa</i>	Elecampane	Root, rhizome	Cough, throat congestion, sexual dysfunction, microbial infections	
<i>Terminalia bellirica</i>	Beleric myrobalan	Whole plant, fruit	Asthma, bronchitis, cough, hepatitis, diarrhea, dyspepsia, laxative	(Gupta et al. 2020)
<i>Marsdemia tenacissima</i> (Roxb.) Moon.	Rajmahal hemp	Root, stem	Cancer, infertility asthma, bronchitis, sore throat, cystitis, pneumonia, poisoning	(Wang et al. 2018)
<i>Embilica officinale</i> Gaerth.	Indian gooseberry	Fruit, leaf	Amnesia, scurvy, viral infections, fungal infections, cough, asthma, nausea, fever, diarrhea, constipation	(Variya et al. 2016)
<i>Tinospora cordifolia</i>	Heart-leaved moon-seed	Root, stem, leaf	Inflammation, dyspepsia, urinary infection, fever, heart diseases, allergy, jaundice,	(Antul et al. 2019)
<i>Picrorhiza kurroa</i> Benth. ,	Kutki	Root, rhizome	Microbial infections, immunomodulatory, dyspepsia, inflammation, fever, liver diseases, cholesterol gallstones	(Debnath et al. 2020)
<i>Plumbago zeylanica</i> Linn.	Ceylon leadwort, doctorbush, wild leadwort	Root, leaf,	Diarrhea, bacterial infections, abdominal discomforts, fever, inflammation, pain, ulcer, piles, sexual enhancement	(Mandavkar and Jalalpure 2011)
<i>Moringa oleifera</i> Lam.	Horseradish tree, drumstick tree	Seed,	Anemia, microbial infection, cancer, bronchitis, fever, heart disease, hypertension, diabetes, diarrhea, gout	(Paikra et al. 2017)
<i>Asparagus racemosus</i> Willd.	Wild Asparagus	Root	Feminine hormonal issue, inflammation, immune dysfunction, gastric ulcers, indigestion, liver diseases	
<i>Berberis aristata</i> DC.	Indian barberry	Fruit, root	Fever, body pain, weak immune system, jaundice, inflammation, microbial infection, , cancer,	
<i>Didymocarpus pedicellata</i> R.Br. (Gesneriaceae)	Stone flower,	Leaf	Renal diseases, kidney stone	
<i>Nelumbo nucifera</i>	Indian lotus, sacred lotus	Rhizome, seed,	Fever, gallstones, microbial infection, neurotropic, piles, heart disease, dysentery, diabetes	
<i>Pinus roxburghii</i> 2011)	Sargent chir pine,	Bark, resin	Dyslipidemia, parasitic worm infestations, edema,	(Rawat and Vashistha 2011)
<i>Andropogon muricatus</i> Retz.	longleaf Indian pine		rheumatism, ulcer, bronchitis	(Singh et al. 2011)
<i>Cinnamomum cassia</i> Presl.	Vetiver, Khus-khus, Chinese Cassia	Grass stem, root Leaf, twig oil	Allergy, perfume, spasm, diuretic, fever. Flatulence, body pain, fungal infection, inflammation, diabetes, compromised immune system	(Singh et al. 2011)
<i>Cinnamomum iners</i> Reinw.ex Blume Wild	Cinnamon	Leaf, bark	Flatulence, appetizer, , inflammatory arthritis, edema, fever, kidney diseases	(Singh et al. 2011)
<i>Desmodium gangeticum</i> DC.	Shal Leafed Bush	Root, leaf	Flatulence, fever, rheumatism, cough, throat congestion, obstructed skin/ducts pore, snake bite, scorpion sting	(Rastogi et al. 2011)
<i>Jateorrhiza palmata</i> Linn.	Calumba	Root	Diarrhea, abdominal pain, fever, emesis, nausea, indigestion, dyspepsia hypertension, bronchitis	
<i>Curcuma longa</i> Linn.	Turmeric	Root	Microbial infection, gastric ulcer, inflammatory disorders, diabetics, liver disorders, cancer	
<i>Cedrus deodara</i>	<i>Deodar cedar</i>	Wood, oil, leaf	Flatulence, renal diseases, fever, heart palpitation pulmonary trouble, urinary diseases, pain	(Sinha 2019)
<i>Acorus calamus</i> L.	Sweet flag,	Rhizome, oil	Flatulence, cough, fever, piles, asthma, microbial, infection, dyspepsia	
<i>Desmodium triflorum</i> DC.	Threeflower ticktrefoil,	Whole plant, leaf	Flatulence, ulcer, burns, itching, diarrhea, cataracts, rheumatism, worms infection, microbial infection, inflammation, convulsion	
<i>Terminalia chebula</i>	Chebulic myrobalan	Fruit	Appetizer, indigestion, liver ailment, stomachic, gastrointestinal disorders, cough,	

<i>Alhagi pseudalhagi</i> Bieb. Desv	Camelthorn, Persian manna plant	Leaf, flower, root stem	Ulcer, rheumatic pains, bilharziasis, gastrointestinal discomforts, urinary tract infections, liver diseases		(Srivastava et al. 2014)
<i>Rhus succedanea</i> L.	Wax tree	Leaf, fruit	Antioxidant,, fever, eye infection, cancer, pulmonary tuberculosis		
<i>Solanum xanthocarpum</i> Schrad & Wendl	Yellow fruit night-shade	Fruit, Root	Asthma, cough, erectile dysfunction, fever, obesity, worm infestation, whitlow, diabetes		
<i>Zingiber officinale</i> Wild Rosc.	Ginger	Root	Vomiting, cough, inflammation, nausea, gastrointestinal disorders, spasm		(Mbaveng and Kuete 2017)
<i>Trachyspermum ammi</i> (L.) Sprague / <i>Ptychotis coptica</i> DC.	Bishop`s weed	Fruit	Sore throat, psoriasis, muscle spasm, microbial infection, bronchitis, flatulence, worm infestation		
<i>Aconitum heterophyllum</i> Wall.	Indian Ateesh`	Root	Inflammation, urinary infection, diarrhea, dysentery, microbial infection, liver disease		(Paramanick et al. 2017)
<i>Aegle marmelos</i> (L.) Correa	Indian bael	Fruit, root, bark	Diarrhea, bacterial infection, viral infection, pain, fever, malaria, inflammation, antihyperlipidaemic, dysentery, cancer,		(Rahman and Parvin 2014)
<i>Holarrhena antidysenterica</i> Wall. ex.A.DC		Bark, seed	Diarrhea, dysentery, amebiasis, anemia, blood disorders, fever, skin disorders		(Jamadagni et al. 2017)
<i>Pavonia odorata</i> Willd.	Fragrant swamp mallow	Rhizome	Fever, skin disorder, herpes, pain, intestinal hemorrhage, dysentery, inflammation		(Nakhare and Garg 1992)
<i>Hedychium spicatum</i> Ham.	Spiked ginger lily	Rhizome	Hypertension, flatulence, digestive disorders, vomiting, diarrhea, inflammation, respiratory infections, bronchitis, pain, fever, snake bite, foul breath, microbial infections,		(Rasool and Maqbool 2019)
Dhanwantara Gutika herbal composition					
<i>Elettaria cardamomum</i>	Green cardamom	Seed	Digestive system disorders, ulcer, vomiting, cough, asthma, respiratory infections, cold, diuretic	Treatment of respiratory diseases, including cold, cough and asthma. Relieves, inflammation	Not Available (Joomy et al. 2019)
<i>Zingiber officinale</i> Wild Rosc.	Ginger	Root	Vomiting, cough, nausea, gastrointestinal disorders, inflammation, spasm	arthritis, sprain, flatulence and bloating	(Mbaveng and Kuete 2017)
<i>Terminalia chebula</i>	Chebulic myrobalan	Fruit	Indigestion, liver ailment, stomachic, gastrointestinal disorders, cough, appetizer,		
<i>Myristica fragrans</i> Houtt.	Nutmeg	Seed	Sexual dysfunction, indigestion, flatulence, neurostimulant		
<i>Solanum indicum</i>	Poison Berry, Indian Nightshade African eggplant	Roots, Berries	Diuretic, bronchitis, asthma, cough, pain, wound		
<i>Swertia chirata</i>	Chirretta	Whole plant, Root	Body weakness, pain, fever, cough, asthma, common cold inflammatory disorders, hypertension, headaches, gastrointestinal disorders		(Kumar and Van Staden 2015)
<i>Cuminum cyminum</i>	Cumin	Seed	Digestive disorders, diuretic, pain, ulcer		
<i>Syzygium aromaticum</i>	Clove	Flower	Skin disorders, respiratory infections, digestive disorders		
<i>Piper cubeba,</i>	Cubeb, tailed pepper	Fruit	Cough, swelling, dysmenorrhea, erectile dysfunction		
<i>Andrographis paniculata</i>	Java pepper Creat, green chiretta	Leaf, juice	Hypertension, skin diseases, viral infections, bronchitis, ulcer, skin diseases, flatulence, dysentery, liver diseases, malaria		(Okhuarobo et al. 2014)
<i>Elaeocarpus ganitrus</i>	Seed		Hypertension, diabetes, asthma, chronic cough, fever tension, viral infections, bacterial infections, cardiovascular diseases, heart diseases, cancer		
<i>Cedrus deodara</i>	Deodar cedar	Wood, oil,	Flatulence, renal diseases, fever, heart palpitation		(Sinha 2019)

<i>Cinnamomum camphora</i>	Camphor tree,	leaf Seed, leaf, stem	pulmonary trouble, urinary diseases, pain Bacterial infection, bronchitis, inflammation, congestion, cough, cold edema, and cold, skin diseases, digestive disorders			(Satyal et al. 2013)
<i>Trachyspermum roxburghianum</i>	Wild celery	Seed, leaf	Gastrointestinal disorders, inflammation, pain, rheumatism, cough, cold, arthritis,			
Talisadi Churna herbal composition						
<i>Abbies webbiana</i>	Indian Silver Fir	Leaf	Cough, asthma, chronic bronchitis, fever, sore throat, respiratory infection, body pain, diarrhea, menstrual pain	Treatment of inflammatory conditions and respiratory tract infections including cough, bronchitis	Not Available	(Ghosh et al. 2010)
<i>Piper nigrum</i>	Black pepper	Fruit	Inflammation, pain, fever, immune dysfunction, bacterial infection, fungal infection, spasm, anxiolytic, hypertension, cancer	caused by viruses and other pathogens. Also used for the treatment		(Damanhour and Ahmad 2014)
<i>Zingiber officinale</i> Wild Rosc.	Ginger	Root	Vomiting, cough, inflammation, nausea, gastrointestinal disorders, spasm	digestive disorders like flatulence		(Mbaveng and Kuete 2017)
<i>Piper longum</i>	long pepper	Fruit	Constipation, asthma, diarrhea, malaria, viral infections, respiratory infections, cough, bronchitis	dyspepsia		(Kumar et al. 2011)
<i>Bambusa arundinacea</i> Retz. (Poaceae)	Bamboo Manna	Leaf	Cough, fever, inflammatory diseases, leprosy, microbial infections, infertility			(Soni et al. 2012)
<i>Elettaria cardamomum</i>	Green Cardamom	Seed	Digestive system disorders, ulcer vomiting respiratory infections, cough, asthma, cold, detoxicant, diuretic			
<i>Cinnamomum zeylanicum</i>	True Cinnamomum	Seed, leaf, stem	Respiratory diseases, digestive disorders and gynaecological ailments			(Ranasinghe et al. 2013).

Table 3: African Traditional Medicine and COVID-19

Medicinal Plant	Common Name	Part(s) in Use	Ethnomedicinal Indication	Use of herbal composition	Anti-Covid-19 Mechanisms	Ref
Nigerian Herbal Recipe A						
<i>Allium sativum L.</i>	Garlic	Bulb	Respiratory problems, constipation, parasitic infestation, snake bite, insect bites	Treatment of respiratory infections including common cold, cough, and with largely unknown	Not Available	(Bayan et al. 2014)
<i>Allium cepa L.</i>	Onion	Bulb	Inflammation, diabetes, obesity, hypertension			(Teshika et al. 2019) (Mbaveng and Kuete 2017)
<i>Zingiber officinale</i>	Ginger	Root	Vomiting, nausea, gastrointestinal disorders, antispasmodic	mecahnisms		(Sonibare and Gbile 2008) (Kamatou et al. 2011)
<i>Piper guineense</i>	West African black pepper	Fruit	Flatulence, indigestion, respiratory infections, rheumatism, and syphilis			
<i>Adansonia digitata L.</i> (Malvaceae)	Baobab fruit	Fruit	Fever, diarrhea, malaria, inflammation, asthma			
Nigerian Herbal Recipe B						
<i>Newbouldia laevis</i> (P. Beauv.) Seeman ex Bureau.	Boundary tree	Leaf	Fever, coughs, constipation, malaria, sexually transmitted disease	Most of the plants are used for the treatment	Not Available	(Akerere et al. 2011)
<i>Azadirachta indica (A. indica)</i>	Neem	Leaf, seed	Asthma, cough, intestinal disorders, wo-	of respiratory infections		(Sonibare and Gbile 2008)

A. Juss			und, phlegm, leprosy			
<i>Allium cepa</i>	Onion	Bulb	Inflammation, diabetes, obesity, hyperdysentery, diarrhea, asthma, diabetes, malaria			
<i>Anchomanes difformis</i>	Forest anchomanes, Blume	Leaf, rhizome				(Aladesanmi 2006)
<i>Tetrapleura tetraptera</i>	Aidan fruit	Fruit	Inflammatory disorders, asthma, diabetes mellitus, hypertension, epilepsy			(Ojewole and Adewunmi 2004)
<i>Xylopi aethiopic a</i>	African pepper	Fruit	Bronchitis, asthma, stomach-aches, infertility, diarrhea, gastrointestinal disorders			
<i>Vernonia amygdalina</i>	Bitter leaf	Leaf	Malaria, inflammation, diabetes, wounds, hypertension, jaundice, diabetes			(Oyeyemi et al. 2018)
Nigerian Herbal Recipe C						
<i>Cymbopogon citratus</i>	Lemongrass	Grassy leaf	Inflammation, pain, fever, anxiety, tension, nausea, vomiting, gastrointestinal disorders, diuresis	Not Available	Not Available	(Oladeji et al. 2019)
<i>Citrus aurantifolia</i>	Lime	Leaf, fruit	Inflammation, anxiety, oxidative stress, diabetes, obesity, microbial infections			
<i>Azadirachta indica A. Juss</i>	Neem,	Leaf, seed	Asthma, cough, intestinal disorders, wound, Phlegm, leprosy			
<i>Mangifera indica</i>	Mango	Leaf, bark	Cough, asthma, bronchitis, diarrhea, rheumatism, insomnia, edema, anxiety, tension			(Shah et al. 2010)
<i>Carica papaya</i>	Pawpaw	Leaf, fruit	Dysentery, fever, piles, asthma, wound, anxiety, flatulence, sexually transmitted diseases			(Vij and Prashar 2015)
<i>Citrus limon</i>	Lemon	Leaf, fruit	Scurvy, cold, cough, hypertension, obesity			(Klimek-Szczykutowicz et al. 2020)
<i>Zingiber officinale</i>	Ginger	Root	Vomiting, nausea, gastrointestinal disorders, spasm			
Jobelyn Formulation						
<i>Sorghum bicolor</i>	Sweet millet	Seed	Blood tonic, bronchitis, pulmonary congestion, cough, diarrhea	Treatment of anemia and antiviral infection, immune modulation and upregulation of antiviral chemokines	Not Available	(Nwinyi et al. 2009) (Ayuba et al. 2014)
Covid-Organics Formulation						
<i>Artemisia annua L.</i>	Sagebrush	Aerial parts	Nausea, vomiting, fever, malaria,			
Other Malagasy plants:	NA	NA	NA			Artemisia is used in the treatment of malaria, fever and inflammation

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