

Table (1-2) contacted

Chrisiti bark used against spasm	Al. 1987
He reported, leaves of z. spaina-christi used to length hair and be poultice of powdered leaves of z. spain-christi are used to heal swelling, while the roots are used as anti puragative.	El. Gazali, etal.1997.
In India reported, the use of the bark of Z. rugosa for treatment of diarrhea, while flower and leaves are used in Menorrhagia.	Pandey 1984
He noticed that, Z. spina Christi was used for backache and arthristi	Babikar 1995
The studies showed, some effect of Z. spina-christi. He found that the dried can be used as antiallergenic, anti-diarrha, anti-septic, diuretic and for wounds.	Ali etal. 1992 palestiuian
Reported that, in Brazil Z. joazeiroi is used as detergent, relief and remedy agenist fever.	Babikar etal.1984
Stated that, seeds of Z. jujube mill are used in Chinese medicine as drug for insomnia and sometimes for sleepness caused by physical emaciation.	Babikar 1995.
In China Zeng found that, seeds of Z. spina used to sedactive, palpitations, stomachic, insomnia, narocotic.	Zeng, et al. 1974
They showed, seeds of Z. valgaris used for stomachic, nervous and exhaustuion.	Zeng and Zhan 1987.
They mentioned that, fruits of Z. fructus are used to treatment setactive and insomnia.	Babikar 1995
They reported that, bark of Z. joaziro (An aqueous extract) are used for fever by oral (pless than 0.05mg.)	Numes et al 1987
He showed that, Z. banches and Z. spina-christi are used to discourage grave-spoolers while leaves are used for darken and lengthier women's hair.	Babuikar 1995

1-6 Biological study on *Z.* species listed as Table (1-3)

Study	Result	Reference
Effect of total saponin of semen <i>Z. sponiosae</i> on brain damage and brain biochemical under cerebral ischemia	The study showed that, <i>Z. spiniosae</i> processes protective effects on cerebral inschemic injures.	Bai, 1996 China
Phytochememical screening of <i>Z. spina-chrisit</i> test for Mollsciacidal activity.	The butanol fraction had signification Molluscicidal activity against <i>B. truncates</i> and <i>B. pfeifferi</i> (up to 50ppm)	Babikar Sudan
Effect of spaponina glucosid of semen <i>Z. spina-chrisit</i> on rats.	The result showed that, butanol extract active as antihyperglycemic activity.	Glombitiza et al 1994.
Test of petroleum ether chloroform and aquaeous extract of leaves and barks of <i>Z. abyssininia</i> against saureus <i>Ecoli</i> and albicans.	An aquaneous extract, had significant against <i>C. albicans</i> .	Gundiza and sibanda 1991
Effect of methanol extract of dried leaves of <i>Z. spina-christi</i> against <i>Corynebackterium</i> <i>Diphetria</i> <i>N. Gororrohea</i> , <i>P.</i>	The result showed, antibacterial against them.	Babiker 1995

Diphetria N. Gororohea, P. Aeruginosa. Salmonellas sp. Streptococcus sp and bacillus.		
Protective effects of total Saponins of semen Z. spinosea on cultured rat myocardial cells.	Data suggest that Z. spinosae is an effective prodective drug for myocardial cell.	Chen and Yu 1990 China
Screening of Z. abyssinica for Molluscidal activity.	The study showed, that the toxic effect of Methanolic extract against Molluscidal.	Kela et al Niger 1989
Toxicity symptoms study in animal use leaves extract of Z. spina – Christ.	The result showed no toxicity symptom in animal.	Babiker 1995
Effect of Z. sativa leaves on blood glucose level in normal and alloxan – diabetic rats.	An alcoholic extract showed hypoglycemic activity in normal and alloxan – diabetic rats the single oral treatment (160 – 400 mg/kg) is dose depended lower in blood glucose in normal animals but there was no observed significant effect on alloxan – diabetic rats it is worth mentioning that lethal dose was > 3000 mg/kg when	Anand ed al 1989

	administered orally in mice.	
Investigation the analgesia antibacterial, antipyretic activity of ethanol extract of dried leaves of <i>Z. spina-Christi</i> .	Their results were significant in all activities test except analgesia.	Tanira ef al 1988
Effect of ethanol extract of the stem bark of <i>Z. spina-christi</i> against <i>E. coli</i> , proteins <i>Vulagris</i> <i>staphylococcus</i> <i>pseudomonas atugjnosa</i> <i>candida albicans</i> and <i>Baullus subtilis</i> .	Antimicrobial activity positive.	Babiker 1995

1-7 Phytochemical work on species *Z. species* listed as table (1-4)

Species	Compound	Nature	Reference
<i>Z.Mauritania</i> (leaves)	Linoleicacid alpha -linolenic	lipid	Sena,1998 USA
<i>Z.lotu</i> (roots)	Four dammarant type saponins were isolated know as: (1) <i>jujube</i> – side A (2) 3-0-beta –D- <i>gluco</i> <i>Puranasl</i> (-->6) -D – gluco , <i>zyranosyl</i> (1-->3) – [alpha- l-rhamnopyranosyl 1-2 alpha –L rabinopyranosyl <i>jujubegenin</i> = <i>jujubeside C</i> (3)3-0-alpha-L- rhmnoopyranosyl (1-2) [beta-D -] <i>Glucopyranosyl</i> (1-3) -beta-D- <i>Giucopyraosyl</i> <i>Lotogenin= iotoside1</i> (4) 3-0- alpha-L – Rhmnoopyranosyl (1-2) (beta –D-) <i>Giucopyraosyl</i> (1-3) (beta-D-) <i>Giucopyraosyl</i> <i>Lotogenin= iotoside1</i> <i>11</i>	Saponine	Renault, 1997 france
<i>Z.mucronata</i> (roots)	Mucronine j	alkaloid	Auvin, 1996 France

