Plant alternative medicine and natural therapies (lis-balchin

Plant oils and extracts have been used for a wide variety ofpurposes for many thousands of years (Jones 1996).

The superposesvary from the use of rosewood and cedar wood in perfumery, toflavoring drinks with lime, fennel or juniper berry oil (Lawless 1995), and the application of lemongrass oil for the preservation of stored foodcrops (Mishra and Dubey 1994) . In particular, the antimicrobialactivity of plant oils has formed the basis of many applications, including raw and processed food preservation, pharmaceuticals, alternative medicine and natural therapies (Lis-Balchin and Deans1997) . While some of the oils used on the basis of their reputedantimicrobial properties have well documented in vitro activity, thereare few published data for many others (Deans and Ritchie 1987 andHili et al. 1997). While these data are useful, the reports are not directlycomparable due to methodological differences such as choice of plant extract(s), test micro-organism(s) and antimicrobial test method(Janssen et al. 1987) . Nigella sativa Linn.

(family Ranunculaceae), commonly known as black seed or black cumm in, is an annual plantthat has been traditionally used in the Indian subcontinent (Pai, et al. 2004) , Arabian countries (Sayed, 1980) and Europe (Lautenbacher, 1997) for culinary and medicinal purposes as a natural remedy for anumber of illnesses and conditions that include asthma, hypertension, diabetes, inflammation, cough, bronchitis, headache, eczema, fever, dizziness and influenza. They are also used in food as a spice and acondiment. Streptococcus spp. has been implicated as primarycausative agents of dental caries (Hamada, et al. 1984). Especially, Strept.

mutans and Strept. sobrinus are known as the cariogenic oralbacteria (Loesche, 1986) . Various pharmacological tests have beencarried out to investigate different compounds in black cumin seeds. Phytochemical studies of the seeds have revealed the presence ofvolatile oil(1.

5%), fixed oil (37. 5%), nigellin, melanthin, arabic acid, carvene, carvone, cymene (Bourgou et al 2010) , thymohydroquinoneand thymoquinone (Houghton, et al 1995). GC–MS helped to deepenour knowledge about these compounds and revealed the new ones: thymoquinone (27. 8–57. 0%), q-cymene (7.

1–15. 5%), carvacrol (5. 8–11. 6%), t-anethole (0.

25–2. 3%), 4-terpineol (2. 0–6. 6%) and longifoline(1. 0–8.

0%) (Burits and Bucar, 2000). Recently, many biologicalactivities of N. sativa seeds have been reported, including: antibacterial(Ferdous and Islam, 1992), antitumour (Worthen et al. , 1998), diureticand hypotensive (Zaoui et al., 2000). The seeds and its oil has a verylow degree of toxicity (Ali and Blunden, 2003). Thymoquinone was thebioactive constituent of the volatile oil of black seed (Bourgou et al. 2010) .

It has been also shown to have promising antitumour effects inanimal models (Badary and Gamal El-Din, 2001) and to increase theantitumor effects of if osamide. Thymoquinone have antibacterialactivity which could be potentiated by antibiotics especially in case ofS. aureus (Halawani, 2009). It has been reported that thymoquinone hasanti-invasive activities in C26 colorectal cancer cells, in addition to atherapeutic role against DMH-induced

colon cancer when administeredat the initiation or post-initiation phases (Badary, l. et al 1999). Moreover, thymoquinone was shown to reduce cisplatin-inducednephrotoxicity without affecting its antitumour activity (Badary et al., 1997).

It exerts also anti-oxidant effects and inhibits inflammation inanimalmodels and cell culture systems (Mansour, l. et al. 2002). Due tothe variability in chemical and aroma composition, marjoram plants arewidely used to flavor food products and alcoholic beverages. They arealso used traditionally for their pharmacological properties, includingantibacterial activities (Sari et al 2006). Satureja hortensis L.

, (Lamiaceae), commonly called summer savory is a well-knownaromatic and medicinal plant widely distributed in the Anatolia regionof Turkey. Leaves, flowers, and stems of summer savory are frequentlyused as tea or additives in commercial spice mixtures for many foods toof fearsome and flavor (Gulluce t et al. 2003). There are several studiesdealing with the anti yeast effects of marjoram essential oils onpathogenic yeast species (Sahin et al 2003, Arici et al 2005 and AbuAl-Basal2009). For this purpose, aims to determine the effect of active Oilsderived from Nigella sativa and Marjoram plants in local markets have attiring inRiyadha against the activity of danger bacteria , fungi and yeast effect of life.