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Pentafiton – a new drug with adaptogenic activity

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Abstract

Based on the Tibetan prescription of prescription the "five roots" developed dry extract, consisting of rhizomes *Polygonatum odoratum (Mill) Druce*, roots *Peucedanum morisonii Bess.*, the roots of *Paeonia anomala* L., roots *Asparagus officinalis* L., fruits of *Tribulus terrestris* L., conventionally called "Pentation". The ingredients it contains a wide range of biologically active substances belonging to different chemical classes: steroids (dioscin, daucosterol, diosgenin, stigmasterol), flavonoids (rutin, astragalin, quercetin, kaempferol, isorhamnetin and their glycosides), phenol carbonic acids (coffee, salicylic, Gallic, benzoic), alkaloids (harmol, harmalin), phenols (paeonol, peonolid). Pharmacological activity of these types of known extraction *Paeonia anomala* show antioxidants and immunomodulating activity; *Tribulus terrestris* – androgenic and immune-stimulating; *Peucedanum morisonii* – antibacterial; *Asparagus officinalis* – the antioxidant and immunomodulatory; *Polygonatum odoratum* – antioxidant. Thus, according to the data of folk and scientific medicine preparations from *Polygonatum odoratum*, *Peucedanum morisonii*, *Paeonia anomala*, *Asparagus officinalis*, *Tribulus terrestris* have a pronounced antioxidant and immunomodulatory effects, which indicates the feasibility of using this composition as an adaptogenic agent. Established the presence of 14 marker components, raw materials which are the source roots of *Peucedanum morisonii* (umbelliferone-6-carboxylic acid, purulency, pozenel, columbianetin isovalerate, orasele, peucedanin, itineration, scrutin), the roots of *Paeonia anomala* (epicatechin, peoniflorin), roots of *Asparagus officinalis* (chlorogenic acid), fruits of *Tribulus terrestris* (quercetin-3-*O*-gentiobiose, kaempferol-3-*O*-gentiobiose, isoquercitrin). The predominant compounds of extract "Pentafion" are the coumarins, the total content of which is made up of 20.17 mg/g of dry weight of extract (2.80%). Terpenoids 8.89 mg/g (0.88%), catechins 3.64 mg/g (0.36%); flavonoids 1.25 mg/g (0.12%) and other classes of compounds account for 0.73 mg/g (0.07%), respectively.

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