Penetapan parameter spesifik dan non spesifik simplisia dan ekstrak etanol 70% akar dan daun sangketan (achyranthes aspera l.) = Determination of specific and non specific parameters of simplicia and ethanolic 70% extract of leaves and root of sangketan (achyranthes aspera l.)

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Abstrak

Tanaman sangketan Achyranthes aspera L. merupakan tanaman yang memiliki banyak khasiat. Dalam upaya pengembangan obat tradisional, proses penjaminan mutu dan keamanan obat perlu dilakukan yakni dengan standardisasi. Standardisasi dilakukan terhadap simplisia dan ekstrak etanol akar dan daun sangketan yang berasal dari tiga daerah yakni Sragen, Klaten, dan Boyolali. Proses ekstraksi menggunakan metode maserasi dengan pelarut etanol 70.

Hasil pengujian terhadap parameter spesifik simplisia akar sangketan yakni kadar sari larut etanol 3,07-4,28 ; kadar sari larut air 6,16-7,48 ; pola kromatogram menggunakan standar -sitosterol, serta kadar fenol total 1,58-1,82 mgGAE/gram simplisia. Hasil pengujian parameter non spesifik simplisia akar sangketan yakni susut pengeringan 5,25-7,28 ; kadar abu total 12,12-17,62 dan kadar abu tidak larut asam 0,87-1,32. Parameter spesifik ekstrak akar sangketan yakni kadar fenol total 33,90-36,88 mgGAE/gram ekstrak. Parameter non spesifik ekstrak akar sangketan antara lain kadar abu total 6,26-9,28 ; kadar abu tidak larut asam 0,10-0,12 ; dan kadar air 5,29-6,75. Sementara itu hasil pengujian terhadap parameter spesifik simplisia daun sangketan yakni kadar sari larut etanol 5,83-9,36 ; kadar sari larut air 10,25-15,44 ; pola kromatogram menggunakan standar -sitosterol. Kadar fenol total 0,93-1,15 mgGAE/g simplisia. Parameter non spesifik simplisia daun sangketan antara lain susut pengeringan 15,25-15,91 ; kadar abu total 14,58-20,79 dan kadar abu tidak larut asam 1,75-2,19. Parameter spesifik ekstrak daun sangketan yakni kadar fenol total 6,94-7,68 mgGAE/gram ekstrak. Parameter non spesifik ekstrak daun sangketan kadar abu total 13,18-14,52 ; kadar abu tidak larut asam 0,14-0,29 ; dan kadar air 10,42-11,16.

.....Sangketan Achyranthes aspera L. is one of many plants which have many efficacies. In the recent development of the traditional medicine, there is a need to have quality assurance and drug security process by standardization. Standardization was carried out on simplicial and ethanolic extract of roots and leaves of sangketan which come from three different regions Sragen, Klaten and Boyolali. Extraction method was maceration with ethanolic 70 as its solvent. The result of specific parameters of roots simplicia of sangketan plant showed ethanol soluble extract 3.07 4.28 water soluble extract 6.16 7.48, chromatogram pattern used sitosterol as standard, and total phenolic content 1.58 1.82 mgGAE g simplicia.

The results of non specific parameters of roots simplicia of sangketan plant showed loos on drying 5.25 7.28 total ash value 12.12 17.62 acid insoluble ash 0.87 1.32. The result of specific parameters of roots rsquo extract of Sangketan plant showed total phenolic content of 33.90 36.88 mgGAE g extract. The result of non specific parameters of roots extract showed total ash value of 6.26 9.28 acid insoluble ash value of 0.10 0.12 and moisture content of 5.29 6.75. Meanwhile, the result of specific parameters of leaves rsquo simplicia of sangketan plant showed ethanol soluble extract 5.83 9.36 water soluble extract 10.25 15.44 chromatogram pattern used sitosterol as standard, and total phenolic content 0.93 1.1,5 mgGAE g simplicia.

The result of non specific parameters of leaves rsquo simplicia of sangketan plant showed loss on drying of 15.25 15.91 total ash value of 14.58 20.79 and acid insoluble ash value of 1.75 2.19. The result of specific parameters of leaves extract of sangketan plant showed total phenolic content of 6.94 7.68 mgGAE g extract. The result of non specific parameters of leaves rsquo extract of sangketan plant showed total ash value of 13.18 14.52 acid insoluble ash value of 0.14 0.29 and moisture content of 10.42 11.16.