

Analysis Of Crude Drugs By Chemical Tests

ASAFOETIDA:

SYNONYMS: Devil's dung, Hing, Gum asfoetida.

BIOLOGICAL SOURCE: It is an oleo-gum resin of living roots and rhizomes of Ferula foetida, belongs to family Umbelliferae.

Chemical tests/Identification tests

Si.no.	Test	Obsevation
1	Fractured surface is treated with sulphuric acid Now washed with water.	Reddish brown colour Violet colour.
2	Asafoetida treated with sulphuric acid .	Reddish brown colour .
3	Fractured surface is treated with 50% nitric acid.	Green colour.
4	Asafoetida treated with water.	Yellowish orange emulsion.
5	10 ml alcoholic extract of drug + con.HCL+ phlorogluciol few drops.	Pink colour.
6	Asafoetida on burning.	Yellow flame.
7	0.5 gm drug + sand + 3mlHCL + 3ml water and triturated for several minutes and boil then add strong ammonia solution to the filtrate.	Blue fluorescence.

conclusion

from the above chemical test the given sample was found to be Asafoetida



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ALOES

SYNONYMS: Musabbar, Ghritkumari, Aloe.

BIOLOGICAL SOURCE: Aloe is the dried juice of the leaves of Aloe barbadensis, belongs to the family - Liliaceae.

Chemical tests/Identification tests

Sl.no.	Tests	Observations
1	<p>0.5 gm Aloe boiled with 50ml of water until nearly dissolved, cool and add 0.5 gm kieselguhr and filter. then follow below test to the filtrate:</p> <p>a. Borax test: 2.5ml solution with 0.1gm borax was heated and add few drops of this in a testtube having water.</p> <p>b. Modified Borntrager Test: 5ml filtrate + 10ml FeCl₃ + 5ml dil. HCl, heated for 10 minute and filter, to the filtrate add benzene, separate the benzene layer then add ammonia solution.</p>	<p>Green fluorescence.</p> <p>Pink to red colour to the ammonia layer.</p>
2	<p>Cupraloin test for isobarbaloin: 10ml of 0.1% solution of Aloe in distilled water, add 1 drop of 5% solution of copper acetate, 0.5ml of saturated solution of NaCl, 1ml of alcohol and warmed.</p>	<p>Pale wine red colour.</p>
3	<p>Bromine test: Add equal quantity of Aloe to bromine solution.</p>	<p>Bulky yellow precipitate of tetra bromaloin.</p>

Conclusion

from the above chemical test the given sample was identified as Aloe.

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