

## THE IDENTIFICATION AND CHARACTERIZATION OF GUM EXUDATES

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Extensive use of gums of plant exudates in Pharmaceutical and Industrial applications suggest a need for analytical methods for the identification of commercially available materials.

The gums studied were of Acacia (Acacia senegal, *mimosoideae*); Tragacanth (Astragalus gummifera, *Leguminosae*); Moringa (Moringa oleifera, *moringaceae*); Divul (Feronia limonia, *rutaceae*); Kihiriya (Acacia chundra *leguminosae*).

Some of these could be identified on the basis of their Physical characteristics such as colour, texture, odour of gums. The texture and the colour of the burnt gums (at 200°C for 2 min) were characteristic and could be used for the identification of gums.

The identification schemes <sup>(1)</sup> discussed are based on several tests (1) Precipitation reactions. (2) Colour reactions.

New reagents introduced for the colour reactions are 5N MeOH/HCl, Folin-ciocalteus phenolic reagent, and Fast blue salt B.

The monomer constituents of Polysaccharides of gums were also characterized <sup>(2)</sup> and detected with naphthoresorcinol and the profiles were used in the identification.

Characteristics TAS profiles, (Thermomicro, separation, transfer and application method according to STAHL of crude gums under various conditions were developed. These can be used for their identification.

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#### References

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