

P-54 ABOUT *DROSERA PELTATA* AND THE STANDARDIZATION OF THE SUNDEW'S TINCTURE (*TINCTURA DROSERAE*)

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Sundew is used as antitussive agent in pectoral potions because of its antimicrobial and spasmolytic activities. They are due to naphtoquinones: principally plumbagin (2-methyl-5-hydroxy-1,4 naphtoquinone) which is the main quinone in European sundews (1).

Unfortunately, these indigenous plants (*Drosera rotundifolia*, *D. intermedia*, *D. anglica*) are becoming very rare. So we decided to study sundews present on the pharmaceutical market. We found two main species. First appeared *Drosera ramentacea*, which doesn't contain plumbagin but a small amount of another naphtoquinone: ramentaceone (5-hydroxy-7-methyl-1,4-naphtoquinone) easily distinguished by TLC. Another species appeared recently in Belgium: *Drosera peltata*. It can be recognized by the presence of caulinary leaves peltated with long hairs forming two auricles on the sides (2). This drug contains plumbagin (3). To determine quantitatively the concentration of naphtoquinones it seemed necessary to standardize a method *via* steam distillation of naphtoquinones. After extraction of naphtoquinones with CHCl_3 the spectrophotometric reading is determined at 425 nm and compared with a solution of plumbagin. We found concentrations up to 4% with *D. peltata*, near 1% with *D. rotundifolia* and frequently less than 0,1% with *D. ramentacea*.

So it seemed us necessary to standardize the drug and principally its tincture. That's why we propose the following limits: 0,1%-0,2% naphtoquinones for the tincture and more than 0,6% for the whole plant. These concentrations are similar to those obtained with indigenous plants. *D. peltata* could then be used with a dilution of the tincture but *D. ramentacea* has to be excluded.

REFERENCES.

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