A-31: Tissue localization of acid proteinases from filarial parasite *Setaria digitata*

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A partial purification procedure and some of the enzymatic properties of a major and a minor acid proteinase of *Setaria digitata* were reported previously. In this report, tissue localization of acid proteinases of *S. digitata* are presented.

Procedure of polyacrylamide gel electrophoresis (PAGE) under non denaturing condition followed by activity staining was developed to separate and to analyse acid proteinases present in crude extracts of different tissues. Aliquots of crude extracts of different tissues of parasite were analysed.

Acid proteinase activities of crude extracts of whole parasite, uterus, ovarian tubes, oesophagus, intestine and body wall were: 2.62, 0.79, 1.4, 0.45, 2.3 and 0.73 U/ml, respectively. PAGE followed by activity staining of crude extract of the whole parasite showed 3 bands with fast, intermediate and slow anodal migration. This suggests the presence of 3 types of acid proteinases in *S. digitata.* Two bands (slow and intermediate anodal migration) were observed with the intestinal extract suggesting the localization of 2 acid proteinases to the intestine. Two bands (intermediate and fast anodal migration)) were observed with the extracts of reproductive tissues, uterus and ovarian tubes suggesting the localization of 2 acid proteinases to the reproductive system. These results suggest that specific localization of acid proteinases in different tissues and their important specific roles in these tissues.

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