Summary

An aerial survey was carried out with a multizonal MKS-4 camara and a multizonal MKS-MS spectophotometer in a 240-ha area. Synthesized false color photographs for visual interpretation were obtained and the optical density of the negatives was measured in the areas of the green (540 nm), red (660 nm) and near infra-red (840 nm) spectrum with a spectrometric sensor comprising 18 spectral areas where 3800 pixels were measured. Vegetative indices were obtained with the optical densities and the spectrometric measurements. Red and yellow colors point to a bright spectrum in the infra-red channel and blue and green show a low spectrum brightness in the infra-red channel. Of the average values of the vegetative indices (IR+R)/ IR-R), (IR-R)/(IR+R) (G *IR)/R^2, the first and the third express better the differences of the mean value and the deviations of the species although in a reverse form. This seems to be related to the different vegetative states of the species in the different grazing areas. The results confirm that the vegetative indices obtained by the spectrum responses of pastures in the green, red

and infra-red bands are able to express the differences in their availability and therefore between species by their growth pattern and density.