Cordeauxia edulis is a bush well adapted to semi-arid regions. $2n = 24$ chromosomes have been counted. The massive and fast growth of its root system contrasts with the slow development of the aerial parts of the seedlings. We suggest a comparison between this slow development and the low content of the seed reserve proteins. Globulins constitute, in fact, only a small part of the whole nitrogen content of the seed compared to alimentary Papilionaceae, e.g., Lablab purpureus. The distribution of amino-acids, dialysable peptides, salino-soluble proteins and insoluble proteins is analyzed. The amino-acid balance of Cordeauxia seed is compared to those of other food proteins. Compared with other legumes, it is characterized by a methionine deficiency. The absence of phytohemagglutins is a favorable factor in the nutritive value.

Hemsley (1907) named the yeheb, a bushy Caesalpiniaceae from the Amherstieae tribe, after Captain H. E. S. Cordeaux, who first obtained botanical samples of it (Fig. 1) in the Ogaden province, Ethiopia, in regions near to Somalia in the ex-Italian territories.

Bally (1966) recalled the story of its discovery and showed the fluctuation of its distribution in the arid zones of Somalia and Ethiopia. The plant is in great danger of extinction. Its distribution area (Fig. 2) is speedily narrowing because of the increase of the population and their herds; the plant is very much exploited and its regeneration is not expected. Animals, mostly goats and camels, are grazing it, and men harvest almost the whole of it for the seeds for their own consumption. Yeheb constitutes the staple food of the nomads of these poor regions. Moreover, the nut is sold on the market and even exported to the coastal cities. To fight this threat, Bally recommends not only the protection of this species, but also its domestication and the introduction of its cultivation in semi-arid and arid areas where it could represent an economical interest. As it is adapted to low and irregular rainfall and survives a very long dry season, it could indeed represent an enormous advantage in the fight against hunger.

The development of cultivation of such plants for the Sahelian zone could constitute an interesting food supplement in an area poor in protein supply. To answer some questions arising from the setting up of such a cultivation programme, we undertook research on the plant’s qualities. Two aspects have been considered: the shoot development and the protein content of the seed.

MATERIALS AND METHODS

We received through the FAO and Mr. Bally three batches of Cordeauxia edulis seeds: two from Somalia were heat-treated for preservation, but we have no details about this treatment; the third one came from Kenya free of treatment. Treated and non-treated seeds were put up for germination on perlite in a nutritive medium. Metaphasic plates were examined after crushing young roots pretreated with oxyquinolene, fixed with acetic alcohol and stained with acetic carmine. Shoot devel-
Fig. 2. Distribution area of Cordeauxia edulis (after Bally). A. Contour of Yeheb area established from authentically recorded localities from 1891 to 1908 (Robecchi-Bricchetti, 1891; Swayne, 1893; Wellby, 1894; Cordeaux, 1907; Gilligan, 1908). B. Yeheb areas seen by recent collectors. Glover, area 1 (1945); Bally, area 2 (1954); Hemming, area 1 (1954); Hemming, area 1 (1954, 1958); Ward, area 3 (1962); Moggi, between Mass and Jessomma, area 4 (1959).