

# WEED CONTROL IN CASSAVA

J.R. Barrios\*

## SUMMARY

DNPB, CMU, atrazine, linuron fluometuron, metabromuron, chloroxuron, diuron, ametrine, prome-trine, neburon, simazine, atraton, fenac, 2-4D ester, MCPA, MCPA + PCP and 2-4D + PCP at various rates have been tested previously as weedicides for cassava and results are briefly reviewed.

New, careful experiments at two planting dates compared a short list of the more promising chemicals from the above list. Fluometuron 2.0 kg/ha a.i., prome-trine 2.0 kg/ha a.i., atrazine 2.0 kg/ha a.i., di-fenamid 3.0 kg/ha a.i. were compared with a weedy check. Fluometuron appeared to be the best.

## RESUME

Des taux variés de DNP, de CMU, d'atrazine, de linuron, de fluomé-turon, de métabromuron, de chloroxuron de diuron, d'amé-trine, de promé-trine, de néburon, de simazine, d'atraton, de fé-nac, d'éther 2-4D, de MCPA, de MCPA + PCP et 2-4D + PCP ont été précédemment testés comme herbicides pour le manioc et les résultats qui en sont issus ont été brièvement passés en revue.

De nouveaux essais menés avec précaution à deux dates de semis ont permis de comparer un nombre réduit de produits chimiques les plus staisfaisants dans la liste ci-dessus. Le fluomé-turon 2.0 kg/ha i.a., le promé-trine, 2.0 kg/ha i.a., l'atrazine 2.0 kg/ha i.a., le difémaded 3.0 kg/ha i.a. ont été comparés sur un témoin adventice. Le fluomé-turon s'est révélé le plus satisfaisant.

## RESUMEN

Se revisan brevemente los resultados de pruebas previas en las que DNPB, CMU, atrazina, linuron, fluometurón, metabromurón, chloroxurón, diurón, ametrine, prome-trine, neburón, simazine atratón, fenac, 2-4 D ester, MCPA, MCPA + PCP y 2-4D + PCP en varias dosis, han sido em-pledos como herbicidas en yuca.

En nuevos y cuidadosos experimentos en donde se usaron dos épocas de siembra, se compararon unos cuantos de los más prometedores productos cuímicos de la lista que se mencionó antes. Se compararon fluo-meturón 2.0 kg/ha i.a., prome-trina 2.0 kg/ha i.a., atrazina 2.0 kg/ha i.a., difenamida 3.0 kg/ha i.a., con un testigo enhierbado. El mejor pareció ser fluometurón.

## INTRODUCTION

Cassava (*Manihot esculenta* Crantz), as other crops, is affected by weeds. These reduce its production due to competition for nutrients, water and light.

Throughout the life of the crop, production of carbohydrate is greater day by day, on a unit area basis than that of cereal crops. The habitat of cassava is in the hot humid tropical and subtropical regions, where a great part of the human population lives and where conditions generally are not favourable for cereal crops.

The world's total production of cassava is about  $100 \times 10^6$  t., and the mean yield is 10 t/ha<sup>6</sup>. This mean yield is very low when compared with those yields obtainable in experimental trials<sup>15, 16, 17</sup>.

As a substitute for cereals, cassava meals and pellets have been increasingly used in recent years. Increased yields can be obtained both by use of improved cultivars and by cultural practices including effi-cient chemical control of weeds.

## REVIEW

The Venezuelan Institute of Agronomy (U.C.V.) has been testing pre-emergence herbicides such as DNBP, CMU and Atrazone since 1963, but no results have been published<sup>14</sup>.

At Cagua, Venezuela, the Shell Service for Farmers<sup>3</sup> tested substituted ureas and triazines. These damaged the crop when applied at 19 and 60 days after planting. The most promising products were fluometuron, linuron and metabromuron. Subsequent trials indicate the value of fluometuron applied at 2 kg/ha of product (80 percent a.i.).

The use of substituted urea herbicides has also been reported by Silva<sup>22</sup> from Minas Gerais, Brazil. The evaluation there was made on the basis of the weight of roots, foliage and branches. The best results were obtained with linuron, followed by diuron, cloroxuron and fluometuron.

\*Universidad Central de Venezuela, Institute de Agronomia, Maracay, Venezuela.