compared with the edible stem (leaves 28–12 and stem 18 gm. per 100 gm.), while the fibre content does not show the same steep rise that is common in grass during summer-time; and it appears to be a useful source of proteins and minerals.

TABLE 1. CHEMICAL COMPOSITION OF RHUBARB LEAVES, PER CENT

Water	Protein	Fat	N. free extr.	Fibre	Ash	Ref.
90·0	2·8	0·4	3·9	1·0	1·9	(23)
91·5	1·6	0·1	5·1	0·7	1·1	(24)
64·5	0·3	0·1	2·6		0·5	(22)

Preliminary observations were made on four mature rabbits, two of each sex, which received a mixed diet including one rhubarb leaf each on the first day, rising to 4 oz. per head by the twenty-fourth day. After the first day there was no serious difficulty in getting them to eat rhubarb leaves. At the end of this time the rabbits were still in good condition and showed no abnormal symptoms.

Feeding Rhubarb Leaves v. Grass

A small feeding trial was started with twenty young Beveren rabbits, aged approximately ten weeks old. These were divided into two similar groups; the control group received grass as their green-food, and the other group received green rhubarb leaves (cut twice weekly), which they cleared satisfactorily by the fourth day. Both lots were also fed a basal allowance of growers meal mash, containing 1·8 per cent calcium, and water daily. Hay was given twice weekly.

Under this system both groups grew well on their respective foods during May and June. In May the young grass was of very good quality and the group fed on it showed only a very trifling advantage in live weight (up to 0·3 oz.); but from the second week of June (sixth week of test) there was a seasonal decline in the feeding value of this green-food, which is reflected in the small advantage in the live weights of the rhubarb group thereafter. After nine weeks comparison the rhubarb group had gained an average of 3·3 oz. more than the grass group. The average weekly weighings for the two groups are set out in Table 2.

TABLE 2. AVERAGE LIVE WEIGHTS (LB. AND OZ.)

	Control grass	Rhubarb leaves	Month
Initial weight	3 2·0	3 2·0	
Week 1	3 7·2	3 7·0	May
2	3 14·0	3 13·7	,,
3	3 15·2	3 14·9	,,
4	4 4·0	4 3·9	,,
5	4 6·5	4 5·7	June
6	4 6·9	4 9·6	,,
7	4 14·1	4 15·8	,,
8	4 14·7	5 1·1	,,
9	5 1·7	5 5·0	June/July

There was no mortality or sickness in either group, and at the tenth week of the feeding comparison half of each group was slaughtered. These were all in excellent condition with substantial deposition of internal fat, irrespective of the feeding group. Carcasses were of ideal size for the domestic trade. The killing weights are summarized in Table 3.

TABLE 3. AVERAGE SLAUGHTER WEIGHTS

Group	Live weight	Carcass cold	Skin	Carcass percentage
	lb. oz.	lb. oz.	oz.	
Grass	5 4·4	3 3·4	8·9	60·9
Rhubarb	5 3·4	3 2·6	9·2	60·7

The carcasses, from both groups, dressed out at a satisfactory ratio to live weight for their age, but failed to show any important difference due to diet.

The remainder of the stock continued to receive grass, including weeds during a droughty spell, or alternatively rhubarb, as their only source of green-food throughout July to the end of October, and the live weights in each of these months showed the rhubarb leaves maintaining a slight advantage over grass, with one exception in September, when they were equal. This was after feeding more weeds than grass to the control group. At the end of October (six calendar months on the respective green-foods) the rhubarb group were heavier by an average of 4 oz. (weights, grass 7 lb. 3·2 oz. and rhubarb 7 lb. 7·2 oz.). Their condition was then noted as 'very good to excellent' and there was no discernible difference in the fur development between the two groups. By this time, the supply of green rhubarb leaves was nearly exhausted and the tops were dying. The feeding comparison then terminated, after demonstrating that this waste material is a satisfactory alternative for grass in these rabbit rations.

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NATIONAL RESEARCH COUNCIL OF CANADA

ANNUAL REPORT

THE twenty-eighth annual report of the National Research Council of Canada, for the year 1944–45 (Ottawa. Pp. 40), includes the report of the President, the financial statement and the reports of the directors of the Divisions of Applied Biology, Chemistry, Mechanical Engineering, Physics and Electrical Engineering, and of the Research Plans and Publications Section and the Section on Codes and Specifications, together with a table of scholarships awarded.

Except for the long-term project on forest-tree breeding, all the work of the Division of Applied Biology was related to the war effort. The fermentation of wheat to give butylene glycol received detailed study in the pilot plant, and the time of fermentation was reduced almost by half by removing carbon dioxide under reduced pressure. Cyclic acetal has been added to the list of chemicals obtainable from butylene glycol, and a continuous process worked out for methyl ethyl ketone. A greatly