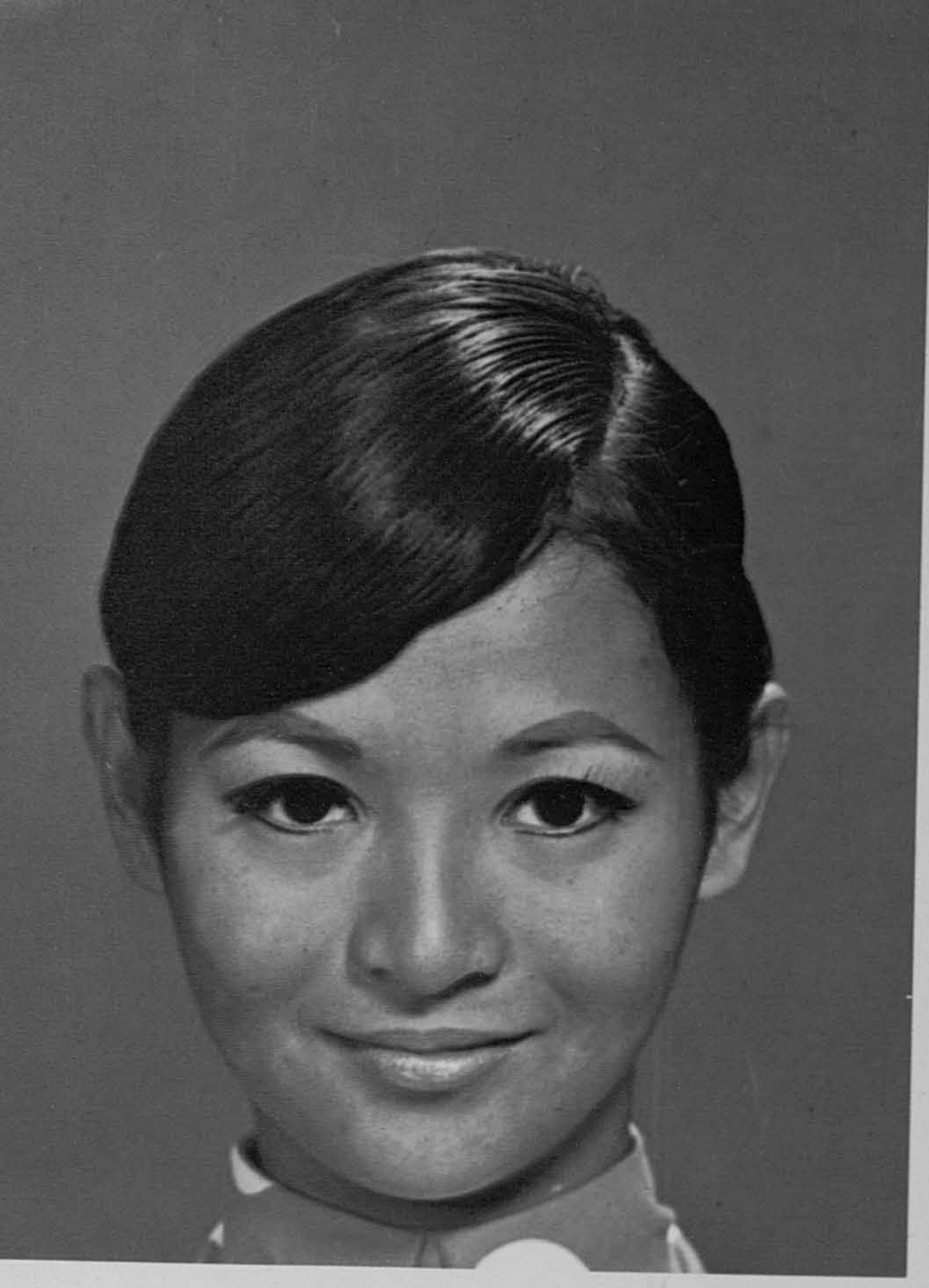
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Editorial:

RAIN, REPLANTING AND FLOODING

The low rainfall in Selangor during 1956, 1958 and 1963 was attributed by some to the extensive replanting and forest clearing operations at that time. Some years such as 1959 and 1966 had heavier rain than the average, although there was equally extensive planting activity then as in the drier years.

Rainfall records have been obtained from seven estates representative of different parts of Selangor for 1947 to 1969. The total areas planted or replanted in Selangor with rubber and oil palm on estates, smallholdings and development schemes in each year have been obtained from the appropriate official sources.

The mean annual rainfall for the seven stations varied from 2009 mm (1963) to 2674 mm (1966), with the average for the whole period being 2347 mm. The area cleared in any year varied from 1671 hectares (1947) to 9504 hectares (1962), averaging 7181 hectares. Up to 1954 the area each year was less than the average but more than the average from 1955 onward. There was no correlation between rainfall and the area cleared each year or in the year previously or in the sum of those two years.

Earlier investigations have shown no long-term trend in annual rainfall over the last seventy years. Therefore it would seem that there is no large-scale effect of clearing and replanting on rainfall. It is difficult to conceive a mechanism whereby the presence or absence of trees would have a marked effect on rainfall.

Where the soil is exposed by clearing there will be stronger insolation and development of convection currents. It is doubtful if these would be strong enough to keep rain off—in fact they would be more likely to cause more precipitation by lifting cloud into the upper strata.

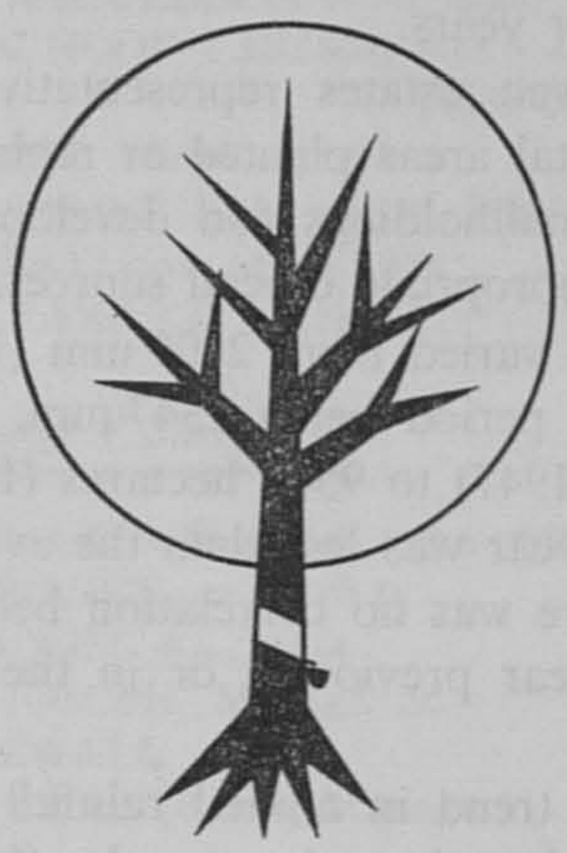
Although there seems to be no detectable effect of clearing on rainfall, there are marked effects on run-off and infiltration. Run-off is much more rapid, infiltration is reduced so that reserves of soil moisture are not replenished so quickly or fully. Stream-flow in dry periods is reduced. Rapid run-off erodes more soil and carries silt into the rivers. Stream-flow is heavier during storms and combined with silting makes floods more likely.

Even if planting operations have no effect on the rainfall, it still behoves planters to conserve soil and water by terracing, silt-pitting, contour, ploughing, planting covers and other measures where appropriate. These increase infiltration of water into the soil and restore reserves where they are needed by the plants. Erosion and silting are reduced. Good terraces make harvesting easier later on and probably increase yield owing to improved infiltration.

Large-scale moving of earth for construction and the rapid run-off under urban conditions probably contributed more to the recent floods and burden of silt in Kuala Lumpur than the earlier agricultural history of the environs. Nevertheless over the country as a whole land development has undoubtedly contributed to the frequency and severity of flooding.

Whether the planter wants to get the best growth and yield from his crops or considers his responsibilities to the community at large, the need for conservation of water and soil is constant and urgent.

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BAGAN DATOH METHOD OF COLLECTION AND RECORDING WET COCOA BEANS FROM FIELD TO FERMENTARY

by

R. C. Evans

Golden Hope Plantations Ltd, Bagan Datoh Estate

With the large acreages of cocoa due to come into bearing in the near future, there is a need for a simple method of collection and recording of wet cocoa beans in the field to ensure their arrival at the fermentary without delay. The method must incorporate a quick turn-around time for equipment from field to fermentary and it should not be labour intensive. In addition the method must provide a rapid but accurate record of the amount of wet beans collected in the field.

The current system of collecting wet beans in rotan baskets and transporting them to the fermentary by tractor and trailer for weighing and recording at the fermentary is satisfactory for small production but is completely inadequate for the large quantities of wet beans that will be obtained from extensive commercial planting now underway.

Drawing on the experience gained from improved methods of collection developed for oil palm bunches* and rubber† the author utilized the basic principles of these methods to design an efficient and simple method of collecting and recording wet cocoa beans in the field.

Equipment Required

The equipment required for our method is as follows:

(1) MF. 165 with HIAB crane (Fig. 1).
(2) Trailer—5-ton Lincoln (Fig. 1).
(3) Steel boxes with plywood lining (Fig. 2).
(4) Box lifting device (Fig. 2).
(5) Rotan baskets with modified handles marked for easy identification by harvester (Fig. 3).
(6) Dipstick (Fig. 4).

Method of Collection

Each harvester is issued with a modified rotan basket with a capacity of approximately 120 pounds of wet beans which he/she is responsible for, to insure proper care of baskets. The basket modification was made as a result of our experience with rotan basket handles breaking under normal collection conditions.

---

* Kulim System of F.F.B. Loading.

† Churn System of rubber collection.

The tractor, fitted with a HIAB crane and trailer has previously placed the plywood-lined steel boxes at the various collection points in the morning.

Cocoa harvesting, traditionally a team effort, is divided into teams of ten. The rotan baskets are filled with wet beans and carried to the collection points where the steel box has been located earlier. Each box, with a capacity of approximately 1 200 lb of wet beans, is numbered. Each team works to fill the box or boxes assigned to their area. When the boxes are filled or collection completed, the tractor fitted with a HIAB crane and trailer picks them up for transport to the fermentary.

Recording and Payment

The cubic capacity of the steel box is calculated and calibrated for dipstick measurement. The dipstick is marked in half inches and the equivalent weight of beans per half inch of dipstick is determined. Each team is issued a dipstick for individual or team weight determinations. After harvesting is completed the team can measure and record the wet beans they collected and return home rather than proceed to the fermentary for weighing. When the box arrives at the fermentary, it is measured by the dipstick method and the weight recorded against the box number. The daily collection records are sent to the divisional office the following morning.

The weight of 1 cubic foot of wet beans varies depending on the bean size, and amount of mucilage, among other factors. Although the difference is small, a control measurement with a one cubic foot box is made when considered necessary. The check weights must be witnessed by the harvesters. Payment to the harvester is made on a basis of pounds of wet beans collected. The payment is made to a contractor who keeps individual and team records.

Transfer of Beans to Fermenting Box

The trailer with boxes of wet beans is taken to the receiving bay in the factory where the weight, in pounds, is recorded for each box. The boxes are then raised and tipped into the first fermenting box by an overhead crane. They are then placed on the trailer ready for re-distribution to the field collection points.

Cost of Additional Equipment

Equipment normally present to harvest cocoa is as follows:

(1) Tractor (Massey Ferguson 165).

(2) Trailer (Lincoln).

(3) Harvest baskets (Rotan).

The additional equipment needed would be as follows:

(a) *Hiab Crane*—Model No. 2451 cost $8 800/-.

This crane has been proven to be efficient and simple to operate in oil palm harvesting by the Kulim System of F.F.B. loading.



FIG. 1. Trailer holds 6 boxes, or approx. 7,200 lb wet beans.



FIG. 2. Hiab Crane adjustable arm allows boxes to be placed easily on trailer.



FIG. 3. Harvesters rotan basket with modified handles, one cubic foot control box and dipstick.

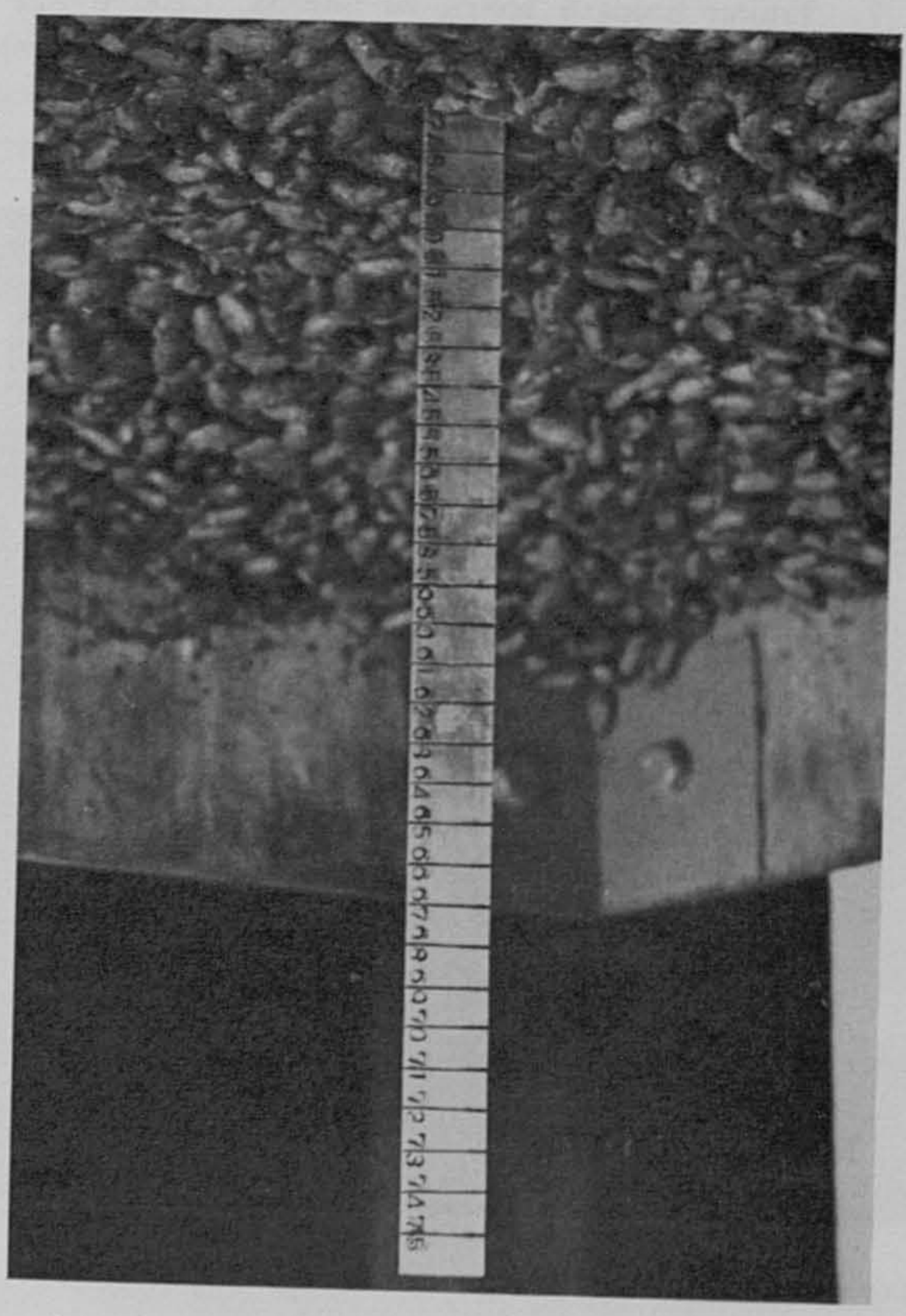


FIG. 4. Dipstick measuring quantity of beans in team box.

(b) *Steel Boxes* (Fig. 1) cost $140/-.

Lifting and Tipping rings similar to an F.F.B. sterilizer cage. Note feet, which allows use of fork lift if required.

(c) *Dipstick* (Fig. 4).

(d) *Control Box* made of chengai costing approx. $9/-.

These are inexpensive items that eliminate labour intensive weighing, as well as expensive scales.

Summary of Advantages

(1) One tractor fitted with a HIAB crane is sufficient for loading and transport of wet cocoa beans from 5 000 acres of mature cocoa, providing the estate has a normal road system (*i.e.* a road every 20 chains equivalent to ± 10 chain carry for harvesters).

(2) This equipment can distribute boxes and load trailers for despatch to the fermenting station by an additional tractor. During peak periods, it will be necessary to utilize additional tractors and trailers to ferry full loads to the fermentary.

(3) The tractor fitted with a HIAB crane and trailer can be used during low crop periods as a conventional tractor for other work (*i.e.* labour transport, fertilizer, etc.).

(4) Supervision and labour requirements are reduced. One factory conductor can easily measure and record the daily wet bean crop.

(5) Harvesters can spend their working day in the field, collecting and splitting pods and emptying wet beans into the collection boxes. This will give a greater output per individual. The harvesters will not need to wait to load trailers or to attend factory check weighings.

Acknowledgements. The author wishes to thank the Directors of the Golden Hope Plantations Ltd. and Messrs. Harrisons & Crosfield (Malaysia) Sdn. Berhad for permission to publish this paper.

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It is considered that a minimum of fifteen years progressive field managerial experience is a necessary requirement but the upper limit could go beyond fifty-five years of age. Formal qualification is desirable but secondary to proven managerial expertise at a senior level together with modern technical knowledge. Additionally, the Field Inspector will be required to have had a few years experience as a Visiting Agent.

The Managers will exercise total responsibility to the General Manager for the estates under their control and the Field Inspector will report to the Agricultural Advisor. For all appointments personal flair and active participation will be expected in the training of Cameroonian managerial staff.

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UNDER-SHADE PLANTING

by

J. A. Walker

Anak Kulim Estate. Kedah

Underplanting may be briefly described as the establishment of a new stand of rubber in an old area due for replanting, whilst retaining the previously selected ground covers, obtaining crop from the old stand for a longer period, ensuring the eventual complete death of the old stand and obtaining the value of nutrients from the rotted timber. Retaining the selected ground covers avoids exposure of the soil to the elements and the subsequent ill effects of so doing.

The normal felling and burning method of replanting necessitates felling in June for burning August prior to planting September/October. The underplanting method allows for continued tapping to the end of the year and January of the following year—8 additional tapping months. The writer has experienced yields of 70 lbs per acre per month at a tapping cost of 26 cts and estimates a profit per acre of $17/- per month at an RSS. 1 price of 65 cts. Thus the profit from the extra 8 months tapping is $17/- × 8 = $136/- per acre.

Normal felling and burning involves poisoning the stumps and treatment of the cut surface. This is an exacting job as, if the poison is to be effective, it must be applied within one hour of felling, before transpiration slows down or ceases altogether. Normally a contract job, this requires close supervision. Employing the underplanting method, the old stand is poisoned in February/March and not felled until August/September, thus allowing 5–6 months for any necessary re-poisoning and ensuring the complete death of the old tree. This factor, needless to say, is most important in relation to root disease. The writer has experienced a 40% rate of infection in a three-yr-old clearing where trees were poisoned after felling. In passing it may be of interest to note that 25% of the infections could only be detected by collar inspection, foliage showing no symptoms.

It has been estimated (Shorrocks, RRIM Journal Volume 19, page 65, 1965) that the nutrient content of a 33-yr-old stand is as follows: —

N	5886 lbs	per acre valued at	$ 612.14
P	1228 lbs	per acre valued at	62.63
K	1768 lbs	per acre valued at	143.21
MgO	1854 lbs	per acre valued at	131.63
	10736		$ 949.61

Normal clearing and burning methods result in the volatilisation of most of the nitrogen and sulphur and the concentration of the remaining elements at the

burnt site, leaving the rest of the area impoverished. The value of the nutrients speaks for itself. Arguments in favour of the revenue from sale of the old stand—say 100 tons per acre @ \$4/- = \$400/-, do not appear to be valid. A brief comparison of relevant costs is appended below: —

Sale of timber		*Retention of timber*	
100 tons @ \$4/-	\$ 400.00	Extra Crop	\$ 136.00
Saving on cost of felling poisoned stand	48.00	Nutrient return value	950.00
	\$ 448.00		\$ 1 086.00

A further disadvantage from the sale of timber is compaction caused by the timber extracting vehicles.

A detailed description follows of the method employed to underplant a hilly/undulating area of 100 acres of 40-yr-old rubber in 1969, using the original terraces.

Nurseries

1. (1968) Calculate the stand per acre of the scheduled new stand and prepare a seedling nursery in 1968. Allowance should be made for a 50% selection of the seedlings for budding and sufficient material to supply 30% of the first planting, thus for 100 acres planted 18 ft × 13 ft = 186 trees per acre, one would require a nursery of ± 50 000 seedlings, the value of which at the time of transplanting would be between 3 and 4 cents each, assuming normal weeding, preparation and manuring.

Terraces

2. (1969) Cut 6 ft long by 5 ft wide platforms, with a slope of $1\frac{1}{2}$ ft at the desired intervals (in this case 13 ft) on the existing old terraces. Where possible stagger the platforms to obtain a roughly triangular pattern. This work should not be done too soon as it should not be necessary to weed the platforms prior to planting.

Holing

3. (1969) Dig $1\frac{1}{2}$ cubic feet holes slightly off-centre towards the back of the platforms. This work is better delayed as long as possible prior to planting to avoid silting.

Budding

4. (1969) The 1968 established seedling nursery should be ready for *brown* budding by June/July and sufficient plants (as above 1) budded with the desired clone. Final opening should be completed by the end of August.

Planting

5. (1969) When regular rainfall is expected, (in the writer's experience in North Malaya, from the end of September) the budded seedlings should be pulled from the nursery, their tap roots trimmed to leave maximum length, laterals trimmed to about 6 in., the top part of the plant (where brown and green bark merge) cut off and the cut end dipped in melted paraffin wax. The plants can be bundled in a conveniently carried number, transported to the area and planted with 4 oz, C.I.R.P. in the hole.

The planting operation requires careful supervision. The bottom of the hole must be firmed down and if necessary, a hole made by a wooden crow-bar to accommodate unusually long tap roots. The plant's collar must be level with the top of the hole and adjustments to the depth of the hole made either by the crow-bar or filling.

To ensure success the bottom of the hole *must* be firm or else the plant tends to subside, taking the bud-patch below ground level. Unlike budded stump planting there is no scion to prevent the plant subsiding.

Supplying

6. (1969) The budded seedling may be expected to 'take' and sprout from its top whorl within 12–20 days of planting. Some partial die-back may be expected and the supplying gang should be trained to recognise a complete failure or test whether the plant is still healthy but, due to die-back, not yet sprouting. The writer has experienced supplying requirements ranging from over 25% to 0.5%. A few days without rain after planting will cause a high percentage of failures.

Weeding

7. (1969) Whether or not platforms require weeding after planting depends on the topography and the extent of the shade from the old stand. The writer has found it necessary to weed once only between planting in October and the end of the year.

Pruning

8. (1970) Some budpatches may shoot during period prior to cutting back and such seedlings should be cut back above the scion.

Poisoning

9. (1970) Assuming yields are still economically obtainable, the old stand may be tapped to the end of January and poisoned in February. If 2-4-5-T is used as the poisoning agent, care must be taken to avoid accidental contact of the poison with the underplanted budded seedling.

Weeding

10. (1970) After poisoning the old stand and defoliation, platform weeding rounds need to be intensified.

It should be remembered that work in the inter-rows after felling the poisoned stand is greatly impeded and any necessary selective weeding and lallang patrolling should be carried out prior to felling. Once the felled timber starts to rot work is easier.

Felling Old Stand

11. (1970) Felling the poisoned stand and cutting back the budded seedlings above the budpatch should be one operation thus reducing the target (now a budded stump) to a minimum. The newly cut back budded stumps may be expected to shoot within 8–12 days after cutting back and this operation should be restricted so that the old stand in that area can be felled within 7 days.

To further minimise damage to budded stumps, the writer has used angle-iron steel guards which are placed over newly cut-back budded stumps adjacent to the tree to be felled. In actual practice it is found that these steel guards are required mainly on gently undulating or flat areas since on steep areas it is found that the back of the platform gives adequate protection from falling timber.

Felled timber is cleared from the platforms, old terraces, paths, roads and drains, and stacked in the inter-row where it is left to rot.

Platform weeding should immediately follow the felling, thus ensuring a clear area for the scion to emerge in.

Supplying

12. (1970) In spite of the supplying carried out in 1969 (item 5) there will be vacancies caused by failure of supplies, damage from various reasons or water-logging in ex-swamp areas. The percentage requirements will vary considerably, but it is a wise precaution to estimate for 25%. This material should be prepared in 1969 for budding in July 1970. In practice, the writer has planted vacant patches in the old stand with 3 seeds at stake per point in the year of planting, and the budded seedlings and the surplus material from these areas have proved ample for use as budded stump supplies for vacancies in the underplanted areas.

The damage from falling timber should account for only about 1.5% of vacancies, other vacancies being due to rodent or monkey depredations, etc.

Manuring

13. After felling and cutting back, the area may be treated normally and fertilizers applied accordingly. No fertilizer, apart from the 4 oz C.I.R.P. in the planting hole, is applied until after the cutting back and felling operation. The writer feels that, before poisoning, the old stand would absorb most of the fertilizers applied to the underplanted budded seedling.

Staking

After cutting back, the scion grows very vigorously due to the change of environment caused by removal of shade from the poisoned tree, and the strongly developed root system of the plant. It has been found necessary in some exposed areas to give the young scion some support in the form of a temporary stake to which the scion is loosely tied, to prevent it being damaged by wind.

Appearance

After felling and stacking in the inter-rows, the area is unattractive compared to a felled and burnt area where legumes have been introduced. However, the timbers are quite soon covered by the existing ground covers, especially *Nephrolepis* if it is present, and the appearance of the area improves rapidly.

Root disease

Through the courtesy of the Manager, Somme Estate, the writer obtained comparisons of losses due to root disease in the 1964 and 1965 underplantings with areas planted in the same years where poisoning after felling was practised.

	Underplants	*Felled, burnt and stumps poisoned*
1964	4.4%	7.0%
1965	3.2%	10.6%

The figures speak for themselves on the hazards of poisoning after felling.

ESTIMATED COSTS TO MATURITY FOR A 1969 UNDERPLANTING

Items of Expenditure	1969	1970	1971	1972	1973	1974	*Total*
1. Felling and Clearing	$ —	$ 61	$ —	$ —	$ —	$ —	$ 61
2. Lallang	—	3	2	2	2	1	10
3. Weeding	3	50	40	32	25	20	170
4. Pests and Diseases	—	1	6	8	6	6	27
5. Planting Material	19	4	—	—	—	—	23
6. Lining, Holing and Planting	34	—	—	—	—	—	34
7. Terracing	41	—	—	2	—	2	45
8. Manuring	3	9	14	16	22	29	93
9. Roads and Bridges	—	2	2	2	1	1	8
10. Drains	2	1	1	1	1	1	7
12. Supplying	4	1	—	—	—	—	5
14. Thinning Out	1	1	2	1	1	—	6
Proportion of General Charges	52	50	30	20	20	20	192
	$ 159	$ 183	$ 97	$ 84	$ 78	$ 80	$ 681
Contingencies (wind damage, etc.)							19
Total cost per acre							$ 700

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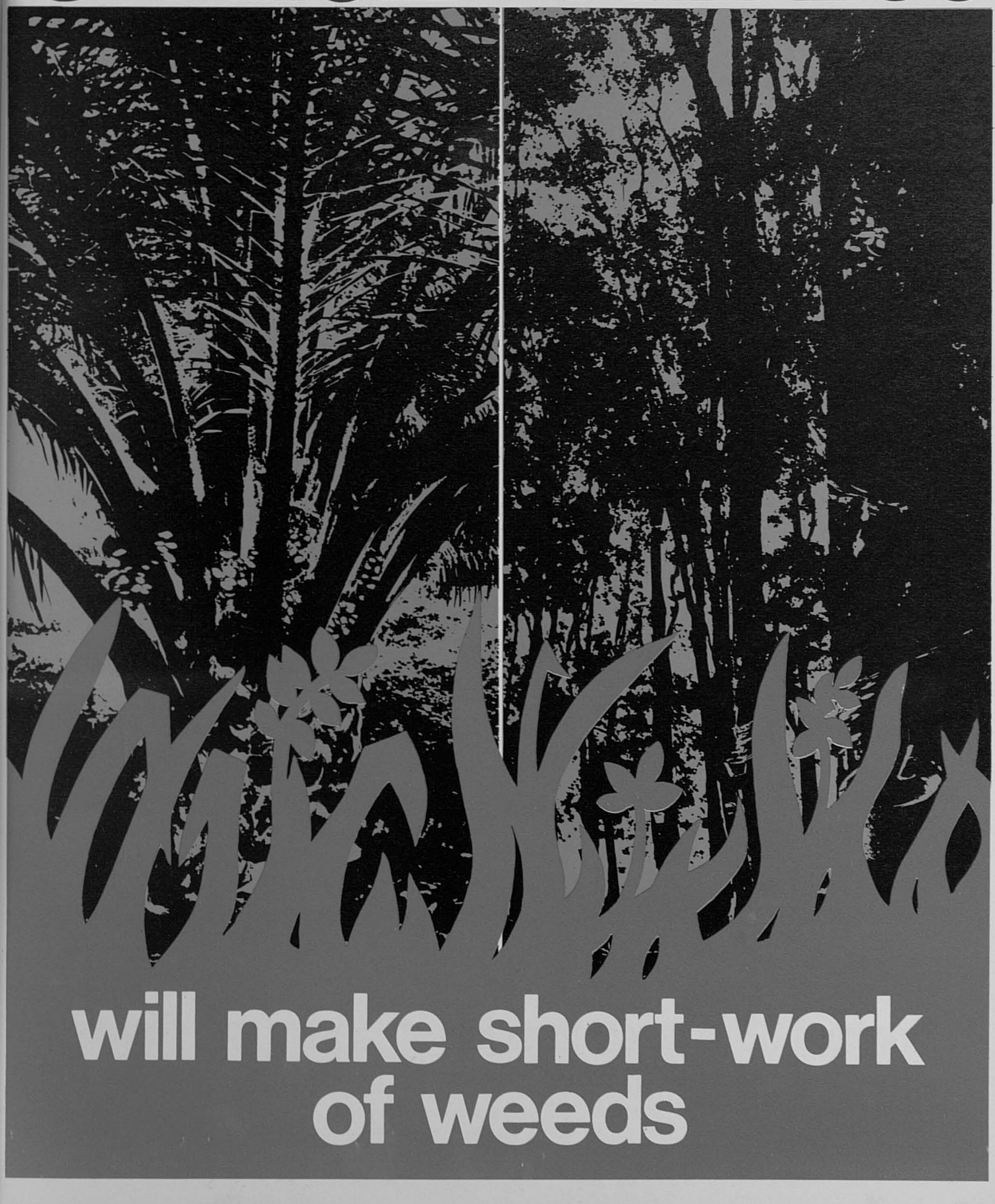
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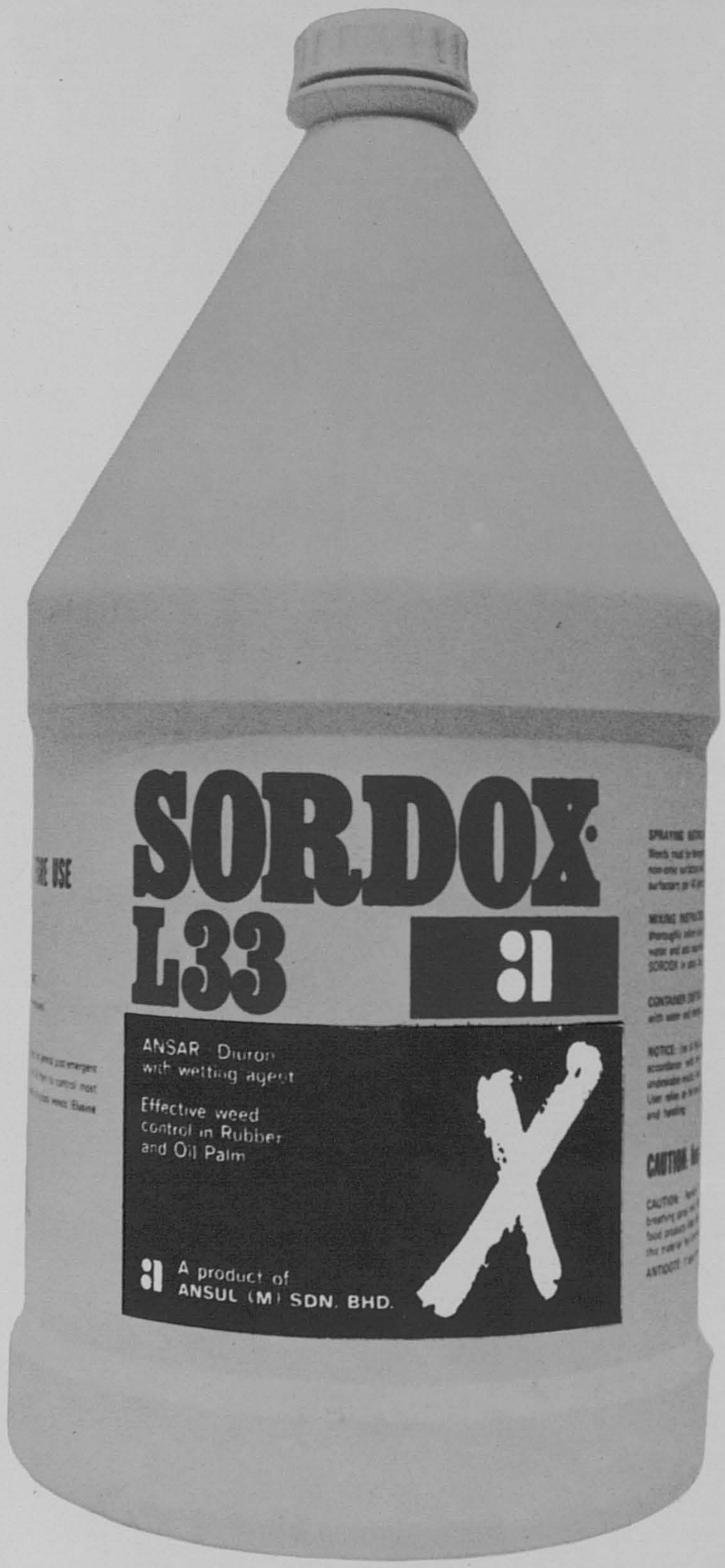
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NOTES ON ESTIMATES TO MATURITY

1. $61/- provides for poisoning (including sodium arsenite) @ $13/- plus $48/- for felling and stacking in inter-rows. (Stand per acre 52).

2. It is assumed lallang is eradicated to a minimum during the years preceding replanting.

3. Provides for selective weeding and platform weeding/strip spraying.

5. Provides for cost of seedling at 10 cents (cost to budding @ 4 cts. = 6 cts. for budding.)

7. Providing for construction of 186 platforms per acre at 22 cts. per platform and later possibly required upkeep at $4/-.

8. Provides for manuring per Planters Bulletin 67 but substituting C.C.M. at 73% of Mg. X.

General Charges

Proportionate costs will vary from estate to estate.

CONCLUSION

Provided each stage of the proceedings is carefully planned and the planting and felling receive close supervision, there should be no difficulty in bringing a healthy stand of virtually root disease-free rubber to maturity.

Whether or not a full manuring programme is necessary, in addition to the slow release of nutrients expected from the rotted old stand, will be apparent from a soil and leaf analysis. It may be found that the rotted timbers release sufficient nutrients to enable the usual fertilizer application to be omitted, in which case straight fertilizers could be applied for any elements required.

The writer is well aware that underplanting is by no means an innovation and that this is not the first paper on the subject. He is only putting on paper his own experience, for what it is worth, especially in relation to root disease.

One of the obvious questions on reading this paper is "why not plant budded stumps *after* felling"? The writer feels that the underplanted budded seedlings develop a strong root system and that the scion from such plants comes away far more quickly than that of a budded stump. Other variations of the method may appeal to some planters and be more suited to their particular circumstances.

Acknowledgement. The author is grateful to Barlow Boustead Estates Agency for permission to publish this paper.

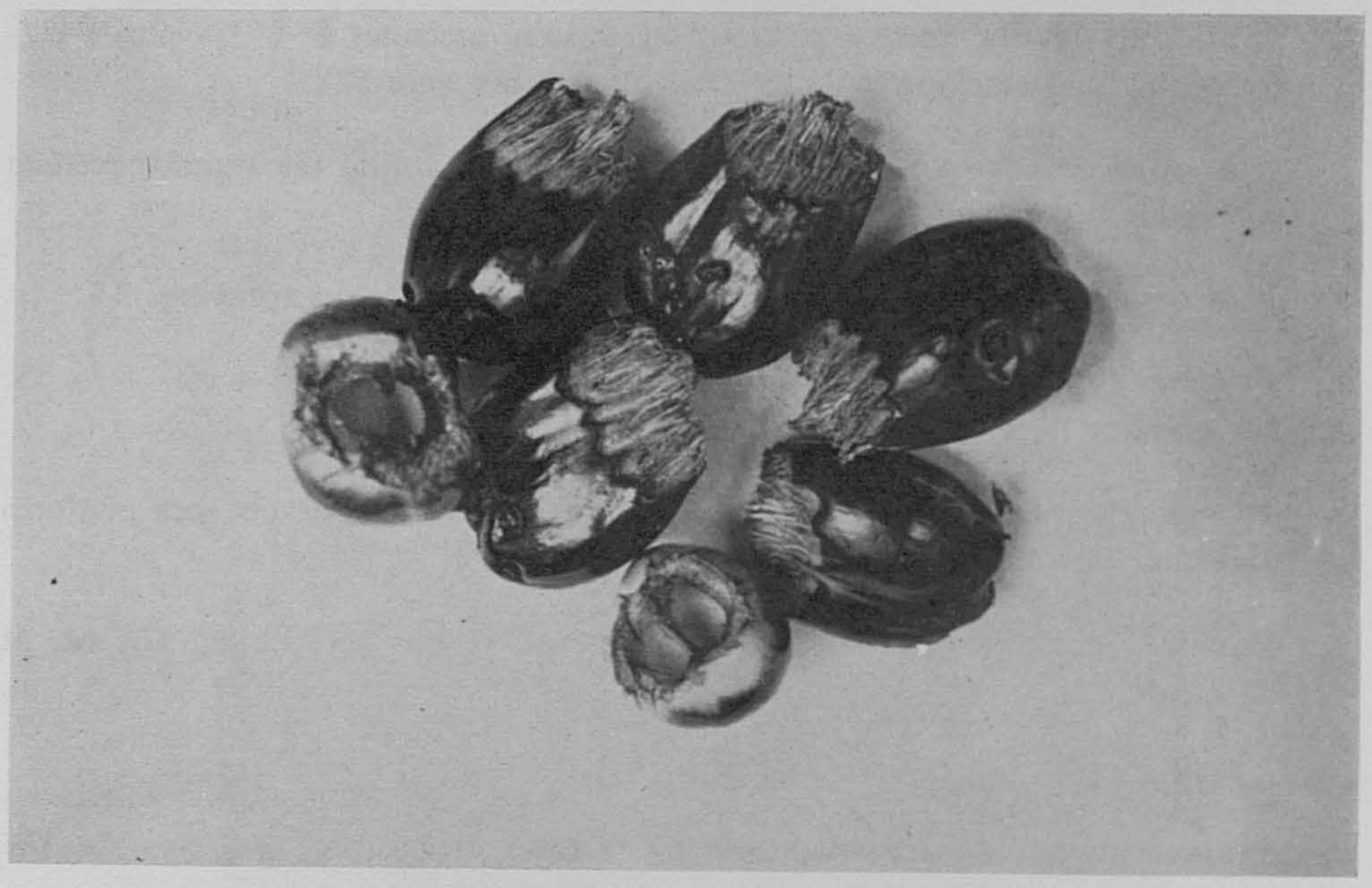


FIG. 1. Damage to immature oil palm fruit by monkeys, showing kernel contents destroyed and basal chewing in which teeth marks are clearly visible.



FIG. 2. Large numbers of immature fruit in a palm circle after being discarded by monkeys.

MONKEYS AS A CAUSE OF FRUIT LOSS IN OIL PALM

by

P. D. Turner

Harrisons Fleming Advisory Services Ltd

1-4 Great Tower St., London E.C. 3, England

Monkeys have long been known as pests of oil palm[1,2] but usually they have not been considered as causing damage of any great economic significance. Damage has normally been confined to young plantings, the monkeys pulling out newly-planted seedlings or tearing out the central spear of more firmly-established palms. In these instances there appeared to be little purpose in the action other than wanton destruction; certainly the tissues have not usually been attacked as a food source.

In numerous oil palm estates in North Sumatra, macoque monkeys occur in much greater numbers than in estates in Malaysia. On one particular estate older fields sometimes support a large population, and it is not uncommon to see thirty or more monkeys scattering at the approach of a vehicle. The range of their food material is unknown, but certainly it includes oil palm fruit. Only young immature fruits appear to be eaten; these are pulled off the bunch, a feat requiring some strength, and the proximal end of the fruit chewed. Thus is the most succulent part of the fruit and sometimes the end is completely eaten away to enable the kernel contents, which are still in a largely liquid form, to be drained off. The damage is illustrated in Figure 1 and the incisor teeth marks are clearly defined on many fruits. After basal chewing, the fruit is of no further interest and is tossed aside. On one estate, many palm circles contained considerable numbers of discarded fruits, as shown in Figure 2.

When discarded fruits reach such numbers there can be little doubt that losses are reaching significant proportions. The fruits removed are those on the exterior of the bunch and so represent the fruit with highest oil content potential. One acre of palms can contain thousands of such fruit, equivalent to appreciable oil and kernel losses. Under these circumstances it is considered that control measures are required, but control has not proved easy. Extraordinary techniques, such as catching a monkey and painting it in vivid colours before releasing it, do not seem to be effective. Hanging a dead animal in a field has been stated to give temporary relief of up to one month, but the population would continue fruit destruction in a nearby field. Sustained control by shooting appears to give the only satisfactory solution to this problem.

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AN ANALYSIS OF ESTATE MANAGEMENT

by

Martin N. Collins

The character of the work of the Estate Manager has changed and will continue to change, for he has moved from being a "Planter" to a "Manager". Although he may have lost most of his past independence, this does not mean that there has been any erosion of his importance; he remains the highest authority on the estate—although less feudal and paternal—whose intimate knowledge of all aspects of the estate are vital to the specialists, advisers and the board of directors with whom he must deal. He must decide on what is desirable, and make it possible; he is the life-giving impetus to sustain and increase effectiveness and efficiency.

Inherent in an efficient management is the continuous self-examination of the manager's own work performance, diagnosis of his own weaknesses as well as of the results obtained by his staff. The object of this paper is to bring together existing knowledge and to state it in usable form.

There are three interdependent functions of estate management.

1. Managing land and capital.
2. Managing and supervising staff.
3. Managing workers and work.

1. MANAGING LAND AND CAPITAL

The overall decision-making in utilising the shareholders' money is the responsibility of the board of directors, but the estate manager's role is important. Firstly, he must feed information back to his board to assist them in making decisions, information gathered at first hand through his experience. Secondly, he will maximise profits through operating efficiently, through the maximum utilisation of land, buildings, and machinery, while minimising costs of maintenance. Thirdly, he will see that stocks of processed products are kept to a minimum by accurate forecasts and control, so that they are turned into cash as quickly as possible. Fourthly, he will purchase equipment at the best prices, and keep it to a minimum. Finally, he must concern himself with the accurate forecasting and estimation of cash requirements to carry out policies effectively, as well as the efficient control and accounting of the cash.

2. MANAGING AND SUPERVISING STAFF

The Manager must create confidence and mutual respect by doing his job efficiently without bias, by being prepared to listen to sound arguments and suggestions, and to admit when he is wrong. He must be approachable, so that facts are not hidden

and thus no conspiracy can arise. His subordinate staff must similarly obtain his respect through also doing a good job. This respect must not be obtained cheaply, as this will create an ineffective gang of "yes men" lacking in constructive thought and initiative.

The way a Manager organises his staff and how much freedom he gives them will depend on their personalities. Motivation and a sense of belonging must be created by leadership and the maintenance of a first-class environment. Each member must be given a definite job which he has the training, ability, and facilities to perform. He must be certain of his responsibilities, which must be incorporated in a written descriptive definition covering at least the following:

Title or position
Responsible to
Responsible for
Special duties.
Limitations
Immediate subordinates
Special duties

Only by such a definition can duplication of work and friction be avoided; if friction does occur the Manager must promptly adjudicate a settlement.

3. MANAGING WORKERS AND WORK

Personnel management, the organisation of human beings so that they carry out their activities effectively is an essential part of the manager's work. The workers are a human resource whose skills comprise a major part of the estate's capital and their wages a major part of expenditure. Unlike other capital resources, workers have control over whether, how much and how well they work. They require motivation, leadership, status, function, satisfaction, incentives and rewards. Management alone can provide these.

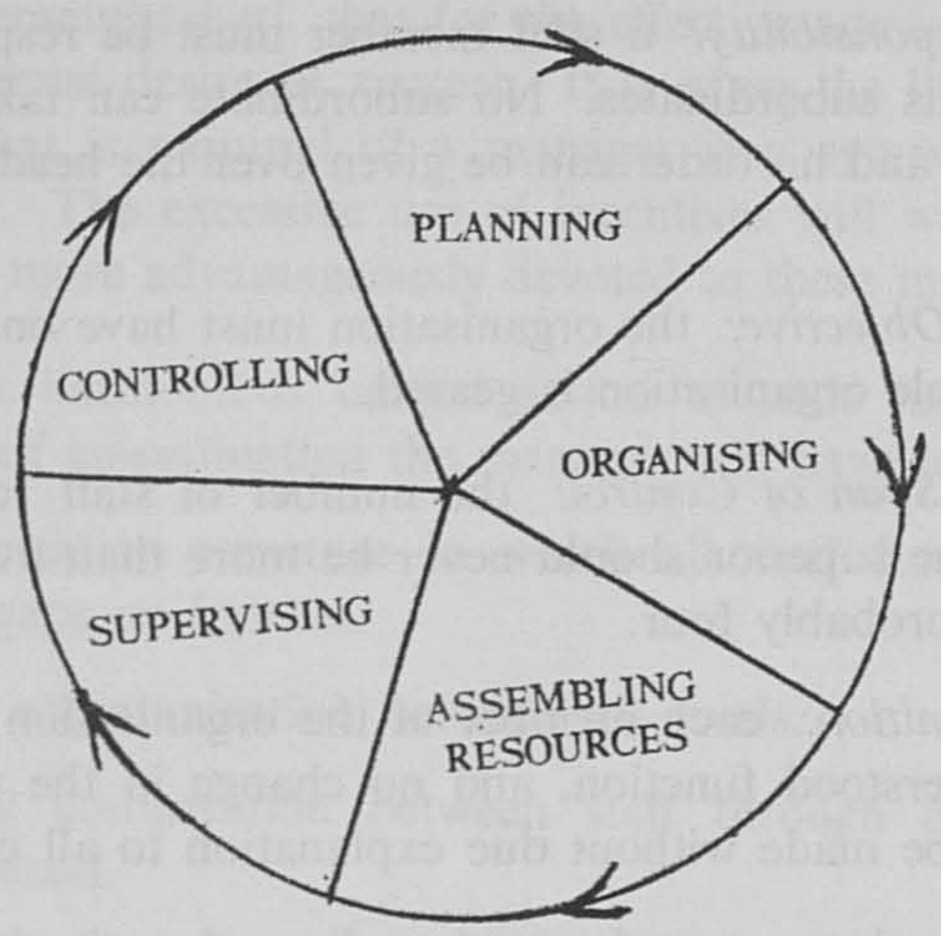
The degree of success with which the Manager fulfills the above functions will be determined by his skill in co-ordinating and exercising control, the efficiency and effectiveness of his staff, as well as external factors beyond his control. However, in order to carry out these functions he must have a sound administration.

ADMINISTRATION

"That part of management concerned with the guidance, leadership, carrying out of procedures and programmes laid down and communicated, and the progress of activities regulated and checked against plans."

It consists of five cyclical elements:

(a) Planning
(b) Organising
(c) Assembling resources
(d) Supervising
(e) Controlling



(a) **Planning**

Although overall policy is decided by the board of directors, specific estate policy is mainly the Manager's responsibility, and all his subordinates must know their objectives; in military terms: the mission must be defined.

Planning is deciding in advance what is to be done, through analysis of past performance and careful forecasting. The degree of planning will depend on:

ability to forecast accurately
flexibility required
expense
time and resources available for planning.

(b) **Organisation**

Organisation is a framework, based on descriptive definitions of responsibilities. An organisation chart is not an organisation structure but an illustration of it, and an indispensable managerial tool. Weakness in an organisation leading to inefficiency is very frequently due to the absence of such definition of responsibilities.

The estate manager is often confronted with remodelling an existing organisation and remoulding its members. When doing this he must adhere to eight basic principles; any weakness in the functioning of any of these will affect the structure of the whole organisation.

1. *Principle of Correspondence:* individual authority must correspond to the responsibility of the position. On estates there is often an erosion of this authority as it tends to gravitate towards the manager who must make a conscious effort to combat such a trend.

2. *Principle of Responsibility:* a staff member must be responsible for the work and actions of his subordinates. No subordinate can take orders from more than one source, and no order can be given over the head of the staff member responsible.

3. *Principle of the Objective:* the organisation must have one common objective, to which the whole organisation is geared.

4. *Principle of the Span of Control:* the number of staff reporting and directly responsible to one superior should never be more than five or six. On estates the optimum is probably four.

5. *Principle of Definition:* each member of the organisation must have a clearly defined and understood function, and no change in the scope of his responsibilities should be made without due explanation to all concerned.

6. *Scaler Principle:* there must be a clear line of authority and responsibility running right through the organisation from top to bottom.

7. *Principle of Specialisation:* each member must have a special and clear function which must be as narrow and specific as possible.

8. *Principle of Co-ordination:* all positions and sections in the organisation must be co-ordinated to achieve the objective of the organisation.

(c) **Assembling Resources**

The efficient functioning of the estate requires the manager to build satisfactory external relationships. These contacts are becoming increasingly more important and sophisticated as they provide the climate within which the estate operates.

The success of the manager in obtaining and maintaining good external relationships will affect the efficient running of the estate, but unfortunately it is an element which is too frequently overlooked. It entails two main aspects: effective public relations with trade unions, local inhabitants, politicians, officials and police; secondly, contacts and relations with suppliers, contractors, dealers, agents, bankers, advisory services, distributors and utility services.

(d) **Supervising**

Supervision is the day-to-day relationship between higher and lower levels of management and staff. It involves three main facets: direction, motivation and co-ordination, leading to the final element in the cycle of administration: control.

Direction is the passing of instructions to subordinates, and the way this is done is frequently given inadequate consideration. Efficiency and effectiveness require an active—as opposed to a passive—obedience. The instructions given to a subordinate must be reasonable in that he must be capable of carrying them out and of being held responsible for their execution. They must be complete and clear, leaving no question in his mind. Their purpose should be explained—a point often overlooked. Finally there must be adequate follow-up of all instructions to avoid any laxity in the administration.

It cannot be overemphasised, that for the effective administration of an estate all the people on it must desire its success. It is often the little things that create such a desire, so what is required of a manager is a sympathetic understanding of human behaviour. The excessive use of incentives will waste too much of his time which could be more advantageously devoted to these more important details.

Co-ordination is harmonious unified action towards the common objective. In securing better staff co-ordination the manager will have to consider:

(i) An organisation structure in which all staff functions fit in without overlap, gaps or friction.

(ii) Effective communication between all levels.

(iii) Voluntary co-operation between staff through official, informal and social contact.

(e) **Control**

The final phase of the administrative process, and the ease with which it is exercised, will depend on how well the other phases have been carried out.

Control assures the manager that the diverse activities of the estate are up to standard. All costs must be kept in line with plans; resources, such as buildings, equipment, stocks, inventories and land, must be effectively used and properly maintained.

The control process involves three basic steps.

1. Setting standards and limits.
2. Checking and reporting on performance.
3. Taking corrective action.

1. *Setting Standards and Limits*

The duties and functions having been clearly defined, standards and limits are laid down. Little day-to-day control over these is required, for with the increase in the size of estates and reduction of staff it should be the aim to reduce time spent on controls to a minimum.

2. *Checking and Reporting on Performance*

The manager will require an assurance that his standards of performance are being observed. He will do this through personal inspection, budgetary control, and reports. In this the manager must beware of unwittingly withdrawing the delegated authority or conveying the impression of lack of confidence in his sub-ordinates. Records and reports should not consume so much of a subordinate's time that they prevent him from attending properly to his main functions, or cause delay in the manager receiving them so that their value is diminished.

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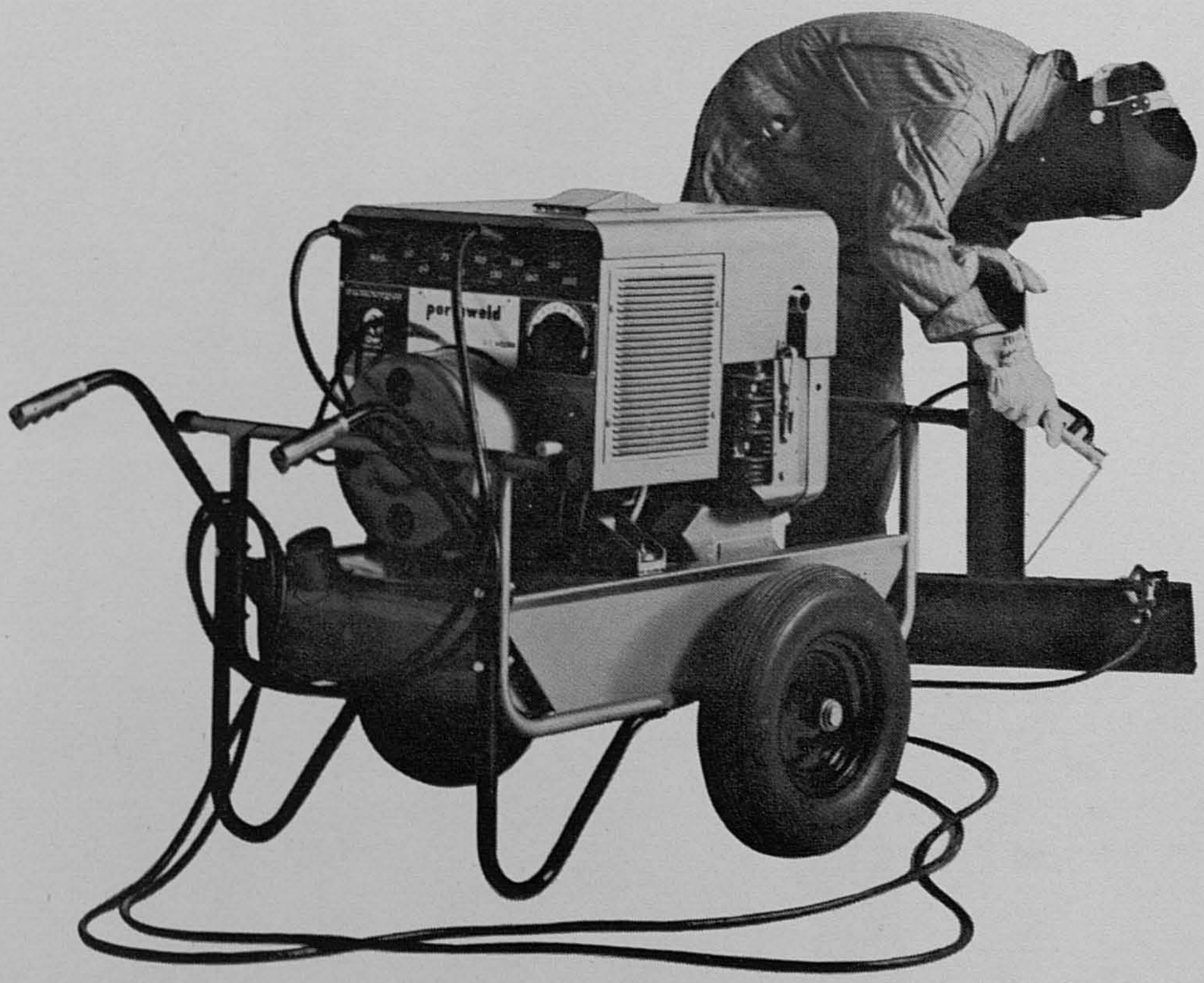
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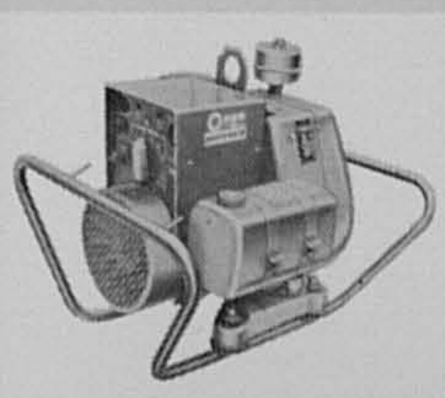
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3. *Corrective Action*

Having set the standards, they must be compared with performances, analysed, and corrective action taken where necessary. These comparisons will also be used in forward planning and forecasting.

The administrative cycle is now complete.

CONCLUSION

As in any other activity the foregoing principles must be adapted to suit the needs of each estate. Estate management however, must never lose sight of the inter-dependence of the elements of administration of a manager's functions with those of all sections of the community.

In converting principles into practice three broad points deserve consideration.

1. Be sure to ascertain the true facts, both technical and economic. There is no substitute for an intimate knowledge of the estate.

2. Adjust to individual personalities, for the human element enters into every activity.

3. Consider the whole situation. No element or facet can be considered on its own, but only in its perspective.

The solution of any problem must be preceded by a careful analysis of the situation. It is hoped that this paper will be of assistance in this respect.

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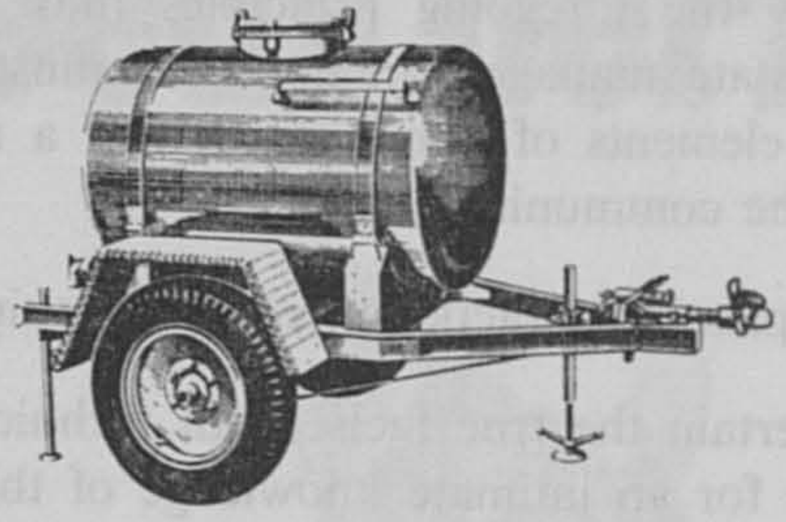
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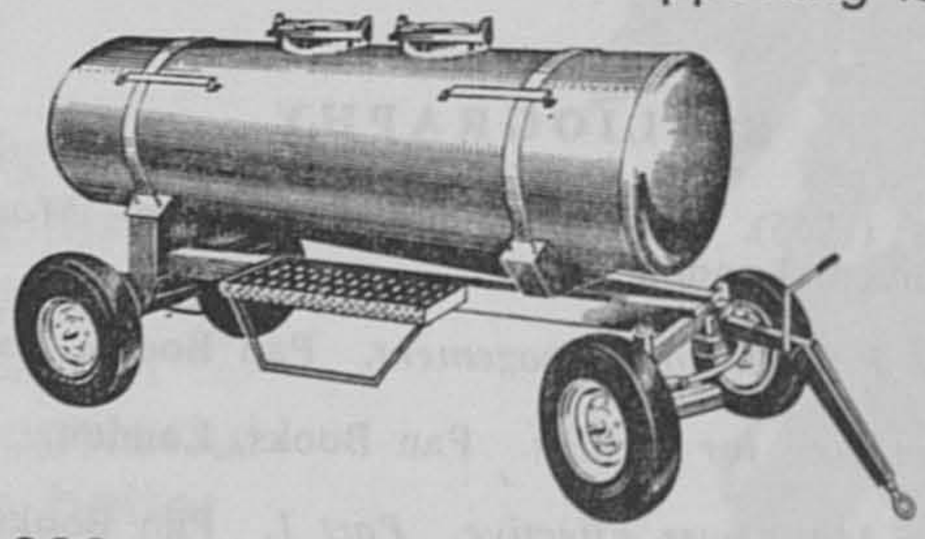
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HEADQUARTERS AFFAIRS

Unpaid Membership Fees are now three months overdue, and Members in arrears of subscription will not receive any more copies of *The Planter* until they have paid up. The Rules also deny these Members the right to vote at meetings and all other membership facilities such as being eligible to take Society examinations. Every year this same situation arises and the Society goes to a lot of unnecessary trouble and expense in sending reminders and registered letters. We appeal to the Members concerned to show a greater sense of responsibility and pay their dues promptly; and please don't forget those out-station bank commissions if you pay by cheque.

Society Headquarters has now been completely re-decorated inside and out, and shows no signs of the recent floods except for an historic high-water mark in the outer office. Adding further to the enchantment is the good news that our insurance claim has been paid in full, and we wish to record our appreciation of the prompt, no-nonsense manner in which The Royal Insurance Group helped the Society recoup the serious losses we sustained.

The Secretary saw little of London's much-publicised permissiveness while on leave there recently, though he did observe a well-established tie emporium in Oxford Street which calls itself "Get Knotted", and a theatre poster advertising a new Swedish production as "Vice and Versa".

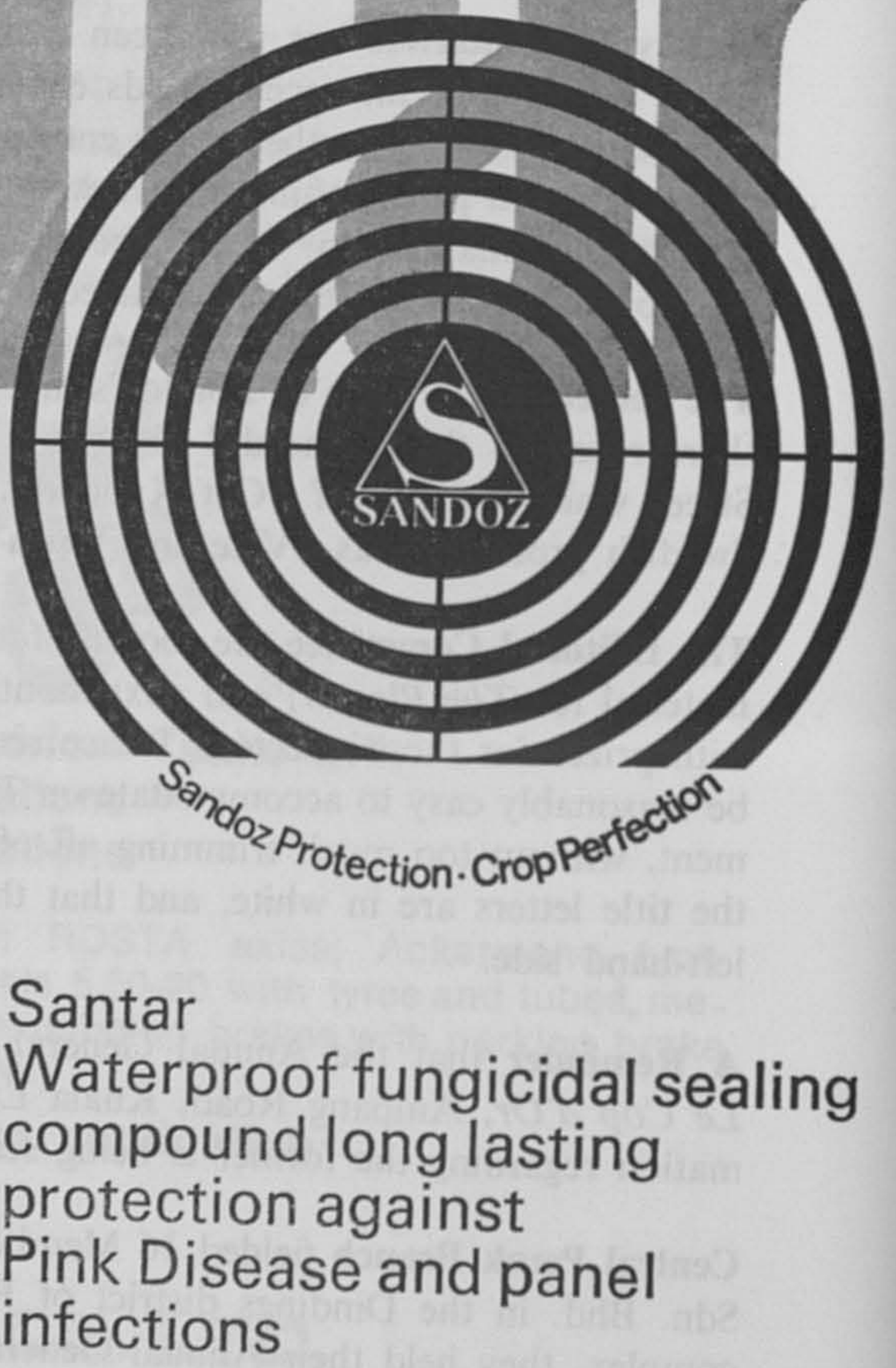
The Editorial Committee are looking for coloured slides for possible use as cover material for *The Planter*, and next month we shall announce a simple competition with prizes for those selected. Please remember that any picture submitted should be reasonably easy to accommodate on *The Planter* cover after appropriate enlargement, without too much trimming off of significant material. Remember also that the title letters are in white, and that they must be fitted in towards the top and left-hand side.

A Reminder that the Annual General Meeting and Luncheon is being held at *Le Cop d'Or*, Ampang Road, Kuala Lumpur on Saturday 17 April. Full information regarding the former is being sent to Members in the Annual Report.

Central Perak Branch fielded 16 Members and 7 visitors on a visit to Gula Perak Sdn. Bhd. in the Dindings district of Perak. Following a conducted tour of the complex, they held their Annual General Meeting before sitting down to a curry.

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The I.S.P. Annual Golf Competition announced last month is fully described in a leaflet enclosed with this issue and entries are now invited. The "Malayan Fertilisers Ltd." trophy illustrated on page 64 of the February issue has been withdrawn from this competition but is being replaced by a similar cup from I.C.I. Agriculture.

Mr. Colin P. Thane, who died in Seremban on 9 March was a very senior Member of the Society. His Membership number was 45 and there are only four other Members alive today who joined the Society before him. An Obituary for Mr. Thane will appear in a later issue.

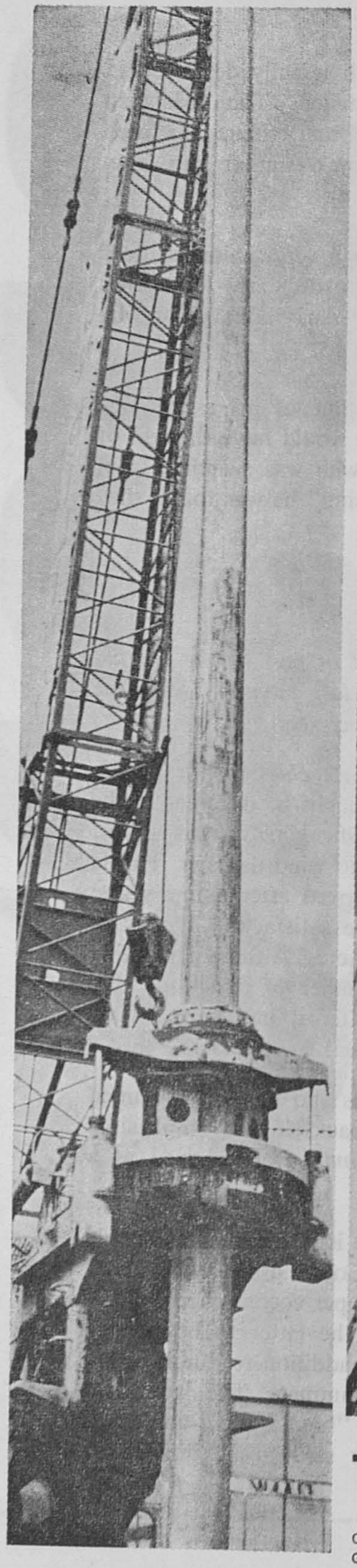
A Popular Fallacy which Charles Lamb wrote about in one of his essays was "That the Worst Puns are the Best". We wonder what he would have thought of a remark made to someone we know in the motor trade who was switched from his normal job to handling Renault and Holden. "Never mind" he was told, "they probably want you to renovate the old 'uns".

We apologise to Dr. J. W. Blencowe for the misplacement of part of the Discussion which he wrote to follow the two cocoa papers in last month's issue (see *page 62*). *The full Discussion is printed below in its correct sequence:*

If a choice were to be made between *Albizzia falcata, A. chinensis* or *Parkia javanica* as planted shade for cocoa, the species selected might be different in the Tawau District than in the Labuk Valley. In the Labuk *A. chinensis* was almost as good as *A. falcata,* although it might prove susceptible to wind damage. Parkia had initially been disappointing in growth-form, but improved after a few years; with Gliricidia as primary shade, Parkia could well prove satisfactory. Costs of establishing planted shade were quoted at $40–$50 per acre. Although planting cocoa under thinned primary jungle had presented a number of difficulties, the possibility of planting under thinned secondary jungle after it had been logged could not be ignored, particularly for plantings by individual smallholders.

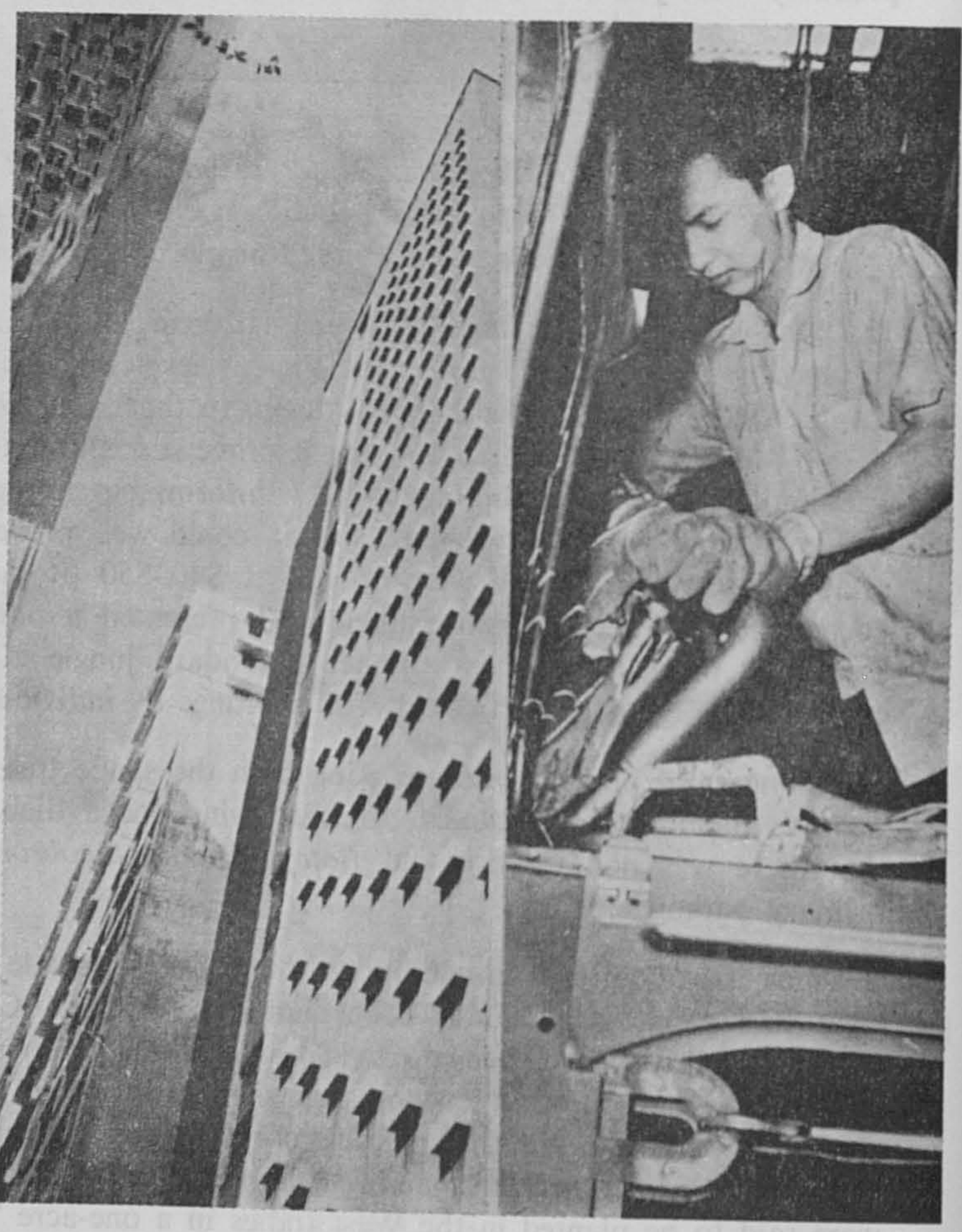
The dangers of pink disease attacking both the shade trees and the cocoa planted beneath them were mentioned. In discussing cocoa dieback, it was emphasised that there was no evidence that *Botryodiplodia theobromae* ever behaved as a primary pathogen.

If cocoa is to be grown in conditions where planted shade is required, then clearly trees that yield an economic crop should be sought. Cocoa grows well under coconuts and may be expected to yield as much as 750 lb per coconut acre; would it be practicable to plant coconuts as shade for cocoa, the latter to be planted some 5–7 years later? Other possible crops suggested (in addition to durian) were kapok, avocado, illipe nut, jambu (*Eugenia* sp.?), and nutmeg. The latter two were said to be planted in the West Indies in a one-acre "box" system analogous to that described in Mr. Chok's paper. Illipe nut was said to be difficult to establish.



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Letters to the Editor:

P.O. Box 1,
Kluang, Johore.
9th March, 1971.

Dear Sir,

In view of the recent increase in interest in Cocoa Planting throughout Malaysia and in Sabah in particular, your readers may be interested in the following extract from the British North Borneo *Herald* dated 1st September, 1889 describing the excellent growth of cocoa trees planted almost a century ago.

Best Wishes,
LESLIE DAVIDSON.

COCOA PLANTING

"Civis" in the July "Herald" draws attention to the early age at which Panglima Ibrahim of Segaliud's cocoa trees bear fruit, and asks for some corroboration. I know the trees in question and to the best of my remembrance they are not yet four years old. I slept in the Panglima's house one night some months ago, and in the morning we all had cocoa together made from the fruit of the plants in question and served in large glass tumblers. Further up the river, on a hill, there are a lot of cocoa plants which were fair sized trees in heavy bearing when I first saw them in 1878, and are in bearing still I believe; I have been told by an experienced planter that in size they far exceed any cocoa plants to be seen in Ceylon. For years they received a minimum of attention, but seem none the worse for it whereas in other countries the cocoa is one of the most delicate of plants requiring constant care and attention. A proper trial would I believe demonstrate that this is one of the best countries in the world for growing cocoa in.

Dr. J. S. Lowe,
Barranquilla,
Colombia.
28th February, 1971.

Dear Sir,

My sea mail copy of the November 1970 *Planter* has just arrived, and on page 390 are some of the examiner's comments on the "Estate Practice Examination, (Oil Palms) 18th September, 1970."

I would like to draw attention to the very effective use that can be made of shell as a nursery mulch. The spreading of $1\frac{1}{2}$ to 2 inches of shell over the nursery area will assist greatly to conserve soil moisture and suppress weed growth, the latter especially if preceded by a herbicide treatment. This practice also prevents soil "capping" from regular watering or rain.

In the case of a basket nursery this mulch of the baskets is equally effective, though the mulching of the general area should not be undertaken until the baskets are positioned.

An important factor is the reduction of soil temperature.

Yours faithfully,
J. S. LOWE.



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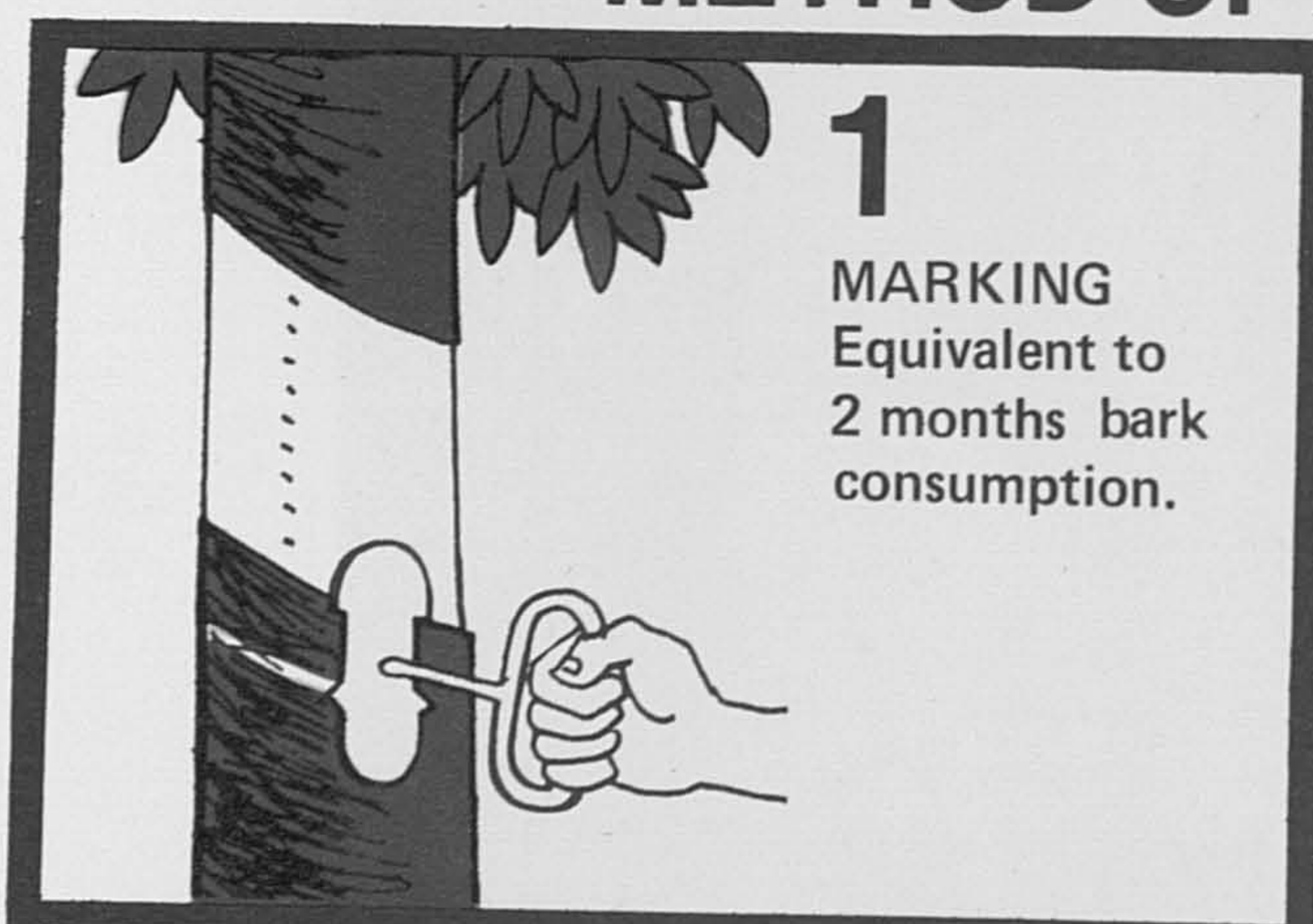


= AVERAGE SIZED 200 TREES



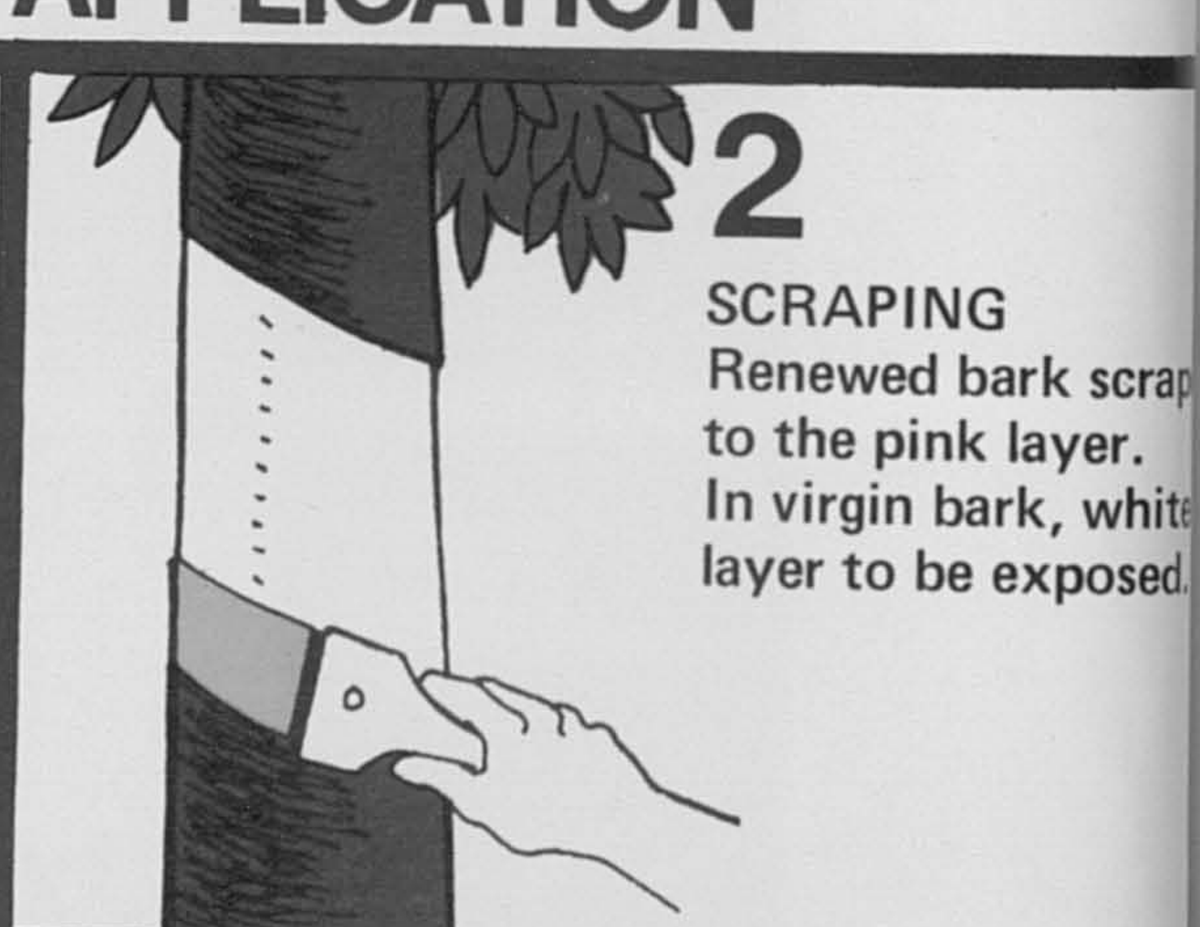
= AVERAGE SIZED 1,600 TREES

METHOD OF APPLICATION



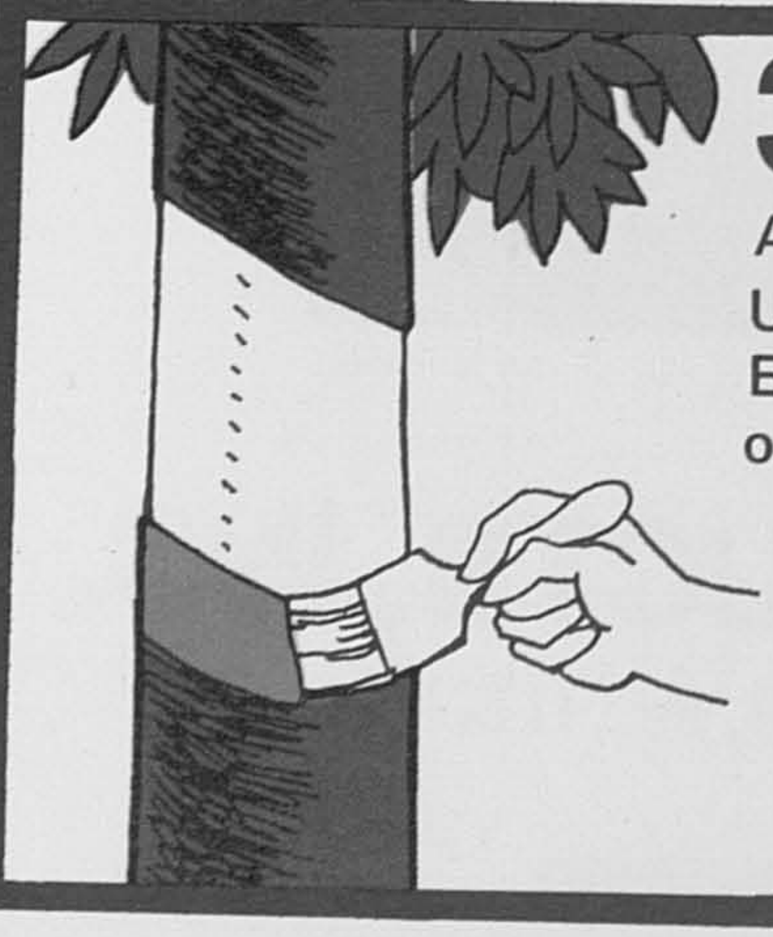
1

MARKING
Equivalent to 2 months bark consumption.



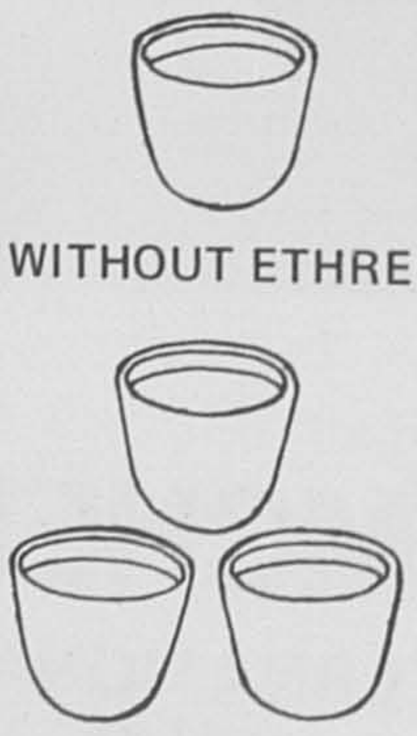
2

SCRAPING
Renewed bark scrap to the pink layer.
In virgin bark, white layer to be exposed.



3

APPLYING:
Use flat brush paint ETHREL evenly on the scraped bark.



4

YIELD:
Without ETHREL: 1 cup
With ETHREL increased by 50 to 200 %.

Letters to the Editor (continued)

From Lt.-Col. A. C. Dexter,
The Gurkha Welfare Appeal,
c/o G.P.O. Singapore.

Dear Mr. Earp,

The Gurkha Welfare Appeal in Malaysia will be officially closed on 31st March, 1971. In May last year you were kind enough to devote the Editorial of *The Planter* to the Appeal and commend it to your readers.

I am writing to you now, on behalf of the Chairman of the Malaysian Committee, Tan Sri Nik Ahmad Kamil, and the Major General Brigade of Gurkhas, Major General Horsford, to place on record our sincere gratitude for the support which we received from Society members.

It is probably true to say that, throughout history, there has never been a closer association between a civilian community and a military force on active service than was experienced in Malaya between the Planting Community and the Brigade of Gurkhas during the twelve long years of the Emergency. The value placed on this association is reflected in the splendid response from your members, some still planting, some retired, who have sent in generous donations from places as far afield as Scotland and New Zealand.

The final total of donations from Malaysia will be announced after a final audit of accounts after 31st March but it will be in the region of $650 000*, nearly one tenth of the Worldwide Appeal Target. The Worldwide total to date has just passed the £700 000 mark.

The Brigade of Gurkhas is now to be retained at a slightly higher strength than was first anticipated, but by the time that Redundancy ends on 31st December this year, 8 000 Gurkhas will have prematurely returned to the "hills". A viable Welfare Scheme is as essential as ever and our gratitude goes to the members of I.S.P. who have helped to put the Scheme on a sound financial footing.

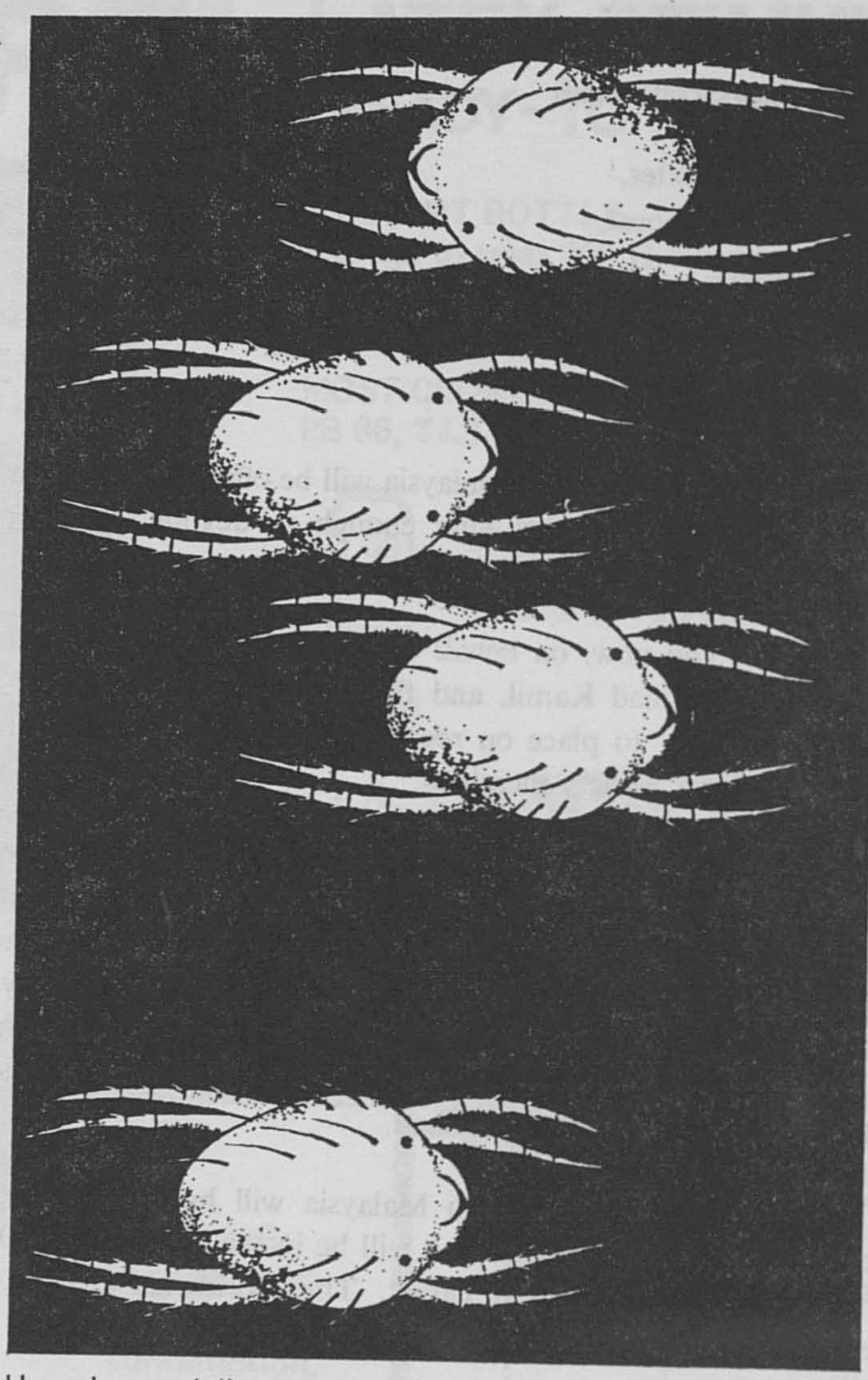
Yours sincerely,

ALAN DEXTER.

2nd March, 1971.

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* Since writing the above Col. Dexter has informed us that total remittances to the Appeal Account in London will be $661 250.



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THE TRENGGANU MONSOON: ITS TRIALS AND TRIBULATIONS

Condensed from an eye-witness report of the recent floods in Trengganu as they affected an oil-palm estate near Kemaman. The report was sent us by a Member who wishes to remain anonymous, although he is not in fact the author. The 17 days described, are from Christmas Day 1970 to Sunday the 10th of January, 1971.

Friday

It was Christmas Day and looked like being a merry one. Members of the Staff visited one another and the General Manager's bungalow was full of visitors from 1.30 to 9.30 p.m.

As it was Friday, there was no work throughout the Estate, and shops were closed. A few of the Christian members of the Staff left the Estate to celebrate the holiday.

There was slight rain at mid-day, which stopped immediately, but during the evening there was intermittent drizzle. The weather was warm and humid, with no indication of the havoc to come in the next few days.

Saturday

It rained from midnight, but stopped before 7.00 a.m. Workers were called out as normal to start work and we concentrated on repairing roads and removing landslides.

Everyone thought that the monsoon which had been delayed so long, was not coming at all. The factory continued to process fruit and our last two loads of oil were despatched by tankers to Port Swettenham. That day we received our mail and papers—the last for some time.

It began to rain again at about 9.00 a.m. and poured down for the whole day and throughout the night. Our rain gauge registered an astonishing 8.20 inches for the past 24 hours.

Sunday

A few hours after midnight, labourers from several contractors' kongsis had to be evacuated to higher ground as flooding had commenced. By morning, the main Padang Kubu access road from the 16th milestone Ayer Puteh/Kemaman Road was cut off at many points, as the Sungei Tebak was now in flood. Rain continued unabated and workers from outside were unable to come to work.

As there was no means of crossing the swift-flowing river, the factory workers on the East bank were not able to report for duty, and the factory had a difficult day with the Senior Engineers working very hard to re-dry our kernels. No processing could be done, as our 90-ton capacity despatch tank was full. Four and a half inches of rain fell on this day, making a total of nearly 13 inches in two days.

Monday

Our airstrip was completely submerged and the sundry shops were under 6 inches of water. This had never happened in previous years, but fortunately there appeared to be no cause for alarm as the water seemed to be receding.

Our roads however remained impassable to all traffic. As our despatch tank was filled to capacity it was decided after discussion with the Factory Engineers to pump our excess oil into the purification tanks.

As the factory labourers were still marooned and unable to cross the river, our Field Staff were recruited to carry firewood to keep the boiler fires burning.

There was still 40 tons of F.F.B. to be processed, but no place to store the oil, as the 500-ton storage tank interior required painting with marine paint. A telephone call was put through to Singapore, and the paint ordered. Soon afterwards all telephone communication was cut off.

Tuesday

Rain continued day and night though not as heavily as before. All our efforts were concentrated at the factory.

On a routine inspection, it was discovered that the turbine gearplate was badly chewed up and urgent replacement was required, as without the turbine, the generator would not be able to run the factory. Due to the extreme urgency, it was decided to send a team of our men to Kemaman to despatch a telegram to Paris requesting Speichim to air-freight the spare part to us immediately. Two of our Junior Staff who could swim, were selected and given rations and funds to swim out to Kemaman.

They started out at 11.00 a.m. swimming and walking all the way (a distance of 26 miles) and were only able to reach Kemaman at 6.00 p.m. that evening.

The telegram was sent next day.

Wednesday

The incessant rain seemed to be slackening and there were occasional glimpses of sun, but not long enough to dry even a handkerchief. Field work was not possible.

The main bridge to the East Bank was still under water, so our efforts remained concentrated at the factory and in collecting firewood for the boilers.

As communications were still cut, a team was sent out to repair the telephone wires. They found that three telephone poles had been washed away and the wire stolen. Ordinary electric wire was inserted and connection made by 3.00 p.m. The first call was to Ayer Puteh, as we had been out of contact for the last few days. We were informed that Chenderong was running short of food, and in Ayer Puteh itself food could last only another four to five days; a telephone call was booked to Kuala Lumpur, but before it came through, the line again went dead. Rice was sent to Chenderong by lorry and boat.

Staff resident at Pelantoh were able to get through with lorries and make sundry purchases at Padang Kubu. In order to keep in touch with the East Bank's labour force, our raft was repaired; 9 drums were welded and planks screwed together, but this was found too heavy and changed for a raft of 4 drums. A 1½-inch diameter rope was used as a cable and by this means some food got across the river to the East bank.

Thursday

The weather improved a bit in the morning, but not enough to allow us to get our communication system going again. The rain gauge again registered over an inch.

With the help of the Staff and any labour that could be collected we managed to complete the processing of all the fruit in the factory. As this fruit was very much over-ripe, (the F.F.A. came to 8.65%) it was put into drums as sludge oil; and not mixed with the purified oil.

Friday

New Year's day and a gloomy one. Rain and water everywhere. At 12.00 noon, tragedy struck. A police constable reported to the General Manager, that a three-year-old boy had died in Block K. As the road was cut off, we had to get people to bring the body down and bury the child in the nursery at Padang Kubu. The Hospital Assistant was very distressed about this death; he thought that had we been able to reach Block K with medicine in time, the child could have been saved. It was believed that the child had died either of pneumonia or acute malaria.

Saturday

Another tragic day! Early in the morning came a report that a number of workers were sick in the lines across the Sungei Tebak. Unfortunately the rope cable across the 300 feet wide flow of the Sungei Tebak was about to give way, so we organised a team with members of our Staff to put another wire cable across. Whilst trying to string the wire cable across, the rope cable gave way.

We then tied the wire cable to the raft, hoping to get it across that way. Our Hospital Assistant volunteered to go, as he was anxious to take medicine over to the sick.

Accompanied by another worker to help him with the raft, it was about 12.00 noon as they paddled across the river. When they were about 20 feet from the East bank on the other side (the river had expanded to more than 300 feet width) the cable fouled some under water snag; water swamped over the raft and it capsized. The Hospital Assistant and his companion were thrown into the rushing waters and struggled to the surface, but despite his companion's attempts to help him, the fierce current swept the Hospital Assistant downstream. The other man managed to cover the last 20 feet to the bank, but the Hospital Assistant was struggling and calling for help. Those on the West bank could see that

he was in difficulties but were powerless to do anything as they were 500 feet away. The Hospital Assistant surfaced for the last time then disappeared under the water. We quickly organised a search party to look for him.

All workers who were good swimmers, about ten of them, risked their lives and jumped into the river to help him, but all were beaten back by the strong current. We can only conclude that he must have drowned despite being a good swimmer. His body has yet to be found. We can only say that he gave his life in the course of his duty. What better way to die?

As our food situation was getting bad we had earlier organised a team to send an S.O.S. to Kemaman. Seven men with rations, ropes and inflated tyre tubes were sent out at 9.00 a.m. with an appeal addressed to the District Officer. Three of them turned back because they were unable to stand the cold. Due to the flood waters, it took the others 10 hours to cover the 10 mile stretch to the 16th-mile junction with the main road which was under 12 feet of water. They stayed overnight there in a hut on high ground. Next morning they set out for Ayer Puteh from where they went by sampan to Kemaman, reaching there at 6.00 p.m. and delivering the message to the District Officer.

Sunday

All efforts to get our cable across the Sungei Tebak failed.

We spent almost the whole day trying, but every time were beaten back by continuous rain and strong current. The last resort was to make a boat. It was a dangerous move; a small boat without motor, proper material and sealing compound could be very risky, but we had no alternative.

At 10.30 a.m. the labourers over the river raised a red flag indicating danger and distress. Using a loud speaker, we were told that sick and hungry persons there required medicines and food. A few strong swimmers using inflated tubes, managed to get some biscuits etc. across, but it was a tiring job.

We hoped for a helicopter, as we heard over the radio that the Government would send one to Kemaman, but we were uncertain and worried whether our team of messengers had reached Kemaman.

Our remaining supply of food in the shops was six bags of rice and ten tins of biscuits.

With a population of over 600 people to feed, it would be two days at the most before we ran out of rice. A meeting was again held to see what could be done for the other groups in Blocks N, C, D, K and Pelantoh, but we were helpless, as we were completely cut off except for Block K. We managed to send messages asking them to evacuate to our main lines. For the others, we could only pray and hope.

Strong and howling winds blew the whole night. It was the worst storm of the past days.

The families began to worry, but we managed to keep up morale.

Monday

This is the eight day of our ordeal. No news from the outside world except by radio. In fact the broadcast was discouraging, with the news that the situation was deteriorating. A meeting was again called to decide our future moves and a decision taken to send out another team of our men to Kemaman for help.

The Television network was completely out since the first day. We managed to get our food supplies distributed across the river, and our last bag of rice was gone.

Then a miracle; the drone of a helicopter was heard. Almost all of us rushed to the landing site near the factory. Everyone was smiling. Some jumped with joy and others sighed with relief. We soon learned that the District Officer had given us first priority as a result of our S.O.S., made fifty hours ago. On the first trip the 'heli' brought essentials such as five bags of rice, sugar, milk and ikan bilis. It made three trips within $1\frac{1}{2}$ hours, and dropped us more rice, flour and sugar.

Our request to have supplies dropped in the various Blocks which were cut off was not granted, as the 'heli' had to serve many other areas. In any case, we in Padang Kubu, were safe for the moment, but we felt down-hearted at having food here, while the outlying Blocks could not be supplied. To relieve matters further, the District Officer sent a wireless set with an operator. We were then in contact with Kemaman.

At night, there was intermittent drizzle and strong winds. The rain gauge registered 2.05 inches.

We have recorded nearly 26 inches of rain in the last nine days.

Tuesday

Rain continued most of the day, but with reduced intensity. The river was going down fast and a radio message could be sent in the morning asking the helicopter to get food into the Blocks.

Rations were packed but the helicopter did not show up, being needed elsewhere.

We decided to make another boat, but with wheels, so that it could navigate both flooded and unflooded roads and get supplies to Pelantoh. However the boat was ready only in the evening and the rescue team could not go out as it was too late. Our acting Hospital Assistant was sent to the main labour lines and there he treated 41 patients.

Wednesday

River water definitely going down, but we still needed our boat to cross it.

At 10.00 a.m. came news that the Hospital Assistant's body had been found about 200 yards from where he disappeared. It was caught up under timber in the river. Despite being under water for four days, the body was fairly well-preserved and not yet decomposed. Preparations were made to recover the body after messages had been sent to the O.C.P.D. and the Medical Officer. The body was recovered at 12.00 noon and the A.O.C.P.D. arrived at 1.00 p.m. by helicopter.

After statements had been recorded and identification made, we were given permission to bury the body. We sent for men to row the A.O.C.P.D. downstream to the 16th milestone; rations were given to our men for the journey. The Hospital Assistant was finally buried at 5.00 p.m. in the graveyard in the nursery. The Pelantoh Ketua Kampong requested rations from us and was given them to help people staying near Pelantoh.

Thursday

For the first time since our troubles began the sun appeared and the sky was clear. The water along the Sungei Tebak was down and the bridge began to re-appear.

At 11.00 a.m., a helicopter arrived. It brought the Mentri Besar, Dato' Mansor and Dato' Sulong; they asked many questions about our plight and after half an hour took off. They assured us that the Government would help in whatever way it could, but we were not given free rations, as these are provided only to the Kampong people.

A Staff meeting was called in the afternoon to dispel rumours, and Staff members were assured that the Company would do whatever it could to help the poor Hospital Assistant's family, who would be compensated by insurance.

That evening a radio message told us a doctor was on his way. We waited until 7.00 p.m. but he never came.

Friday

This is the 13th day. Weather has turned cloudy again and the sun has disappeared. Anyway it is a Friday and only a few workers turned up for work. We offered them work because it was the only way to help them earn a few dollars; most of them will have lost at least a half-month's pay by the time work is resumed.

At 12.30 p.m., it was confirmed that a doctor would be coming. A helicopter arrived at 1.15 p.m. bringing a Nursing Sister, a Hospital Assistant, a midwife and an attendant. They also brought medical supplies to help inoculate the entire population of the estate.

They started work at 3.00 p.m. giving cholera and typhoid inoculations at the same time. We offered them our Guest House to stay in.

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PANEL DISEASES

BLACKSTRIPE ?

MOULDYROT ?

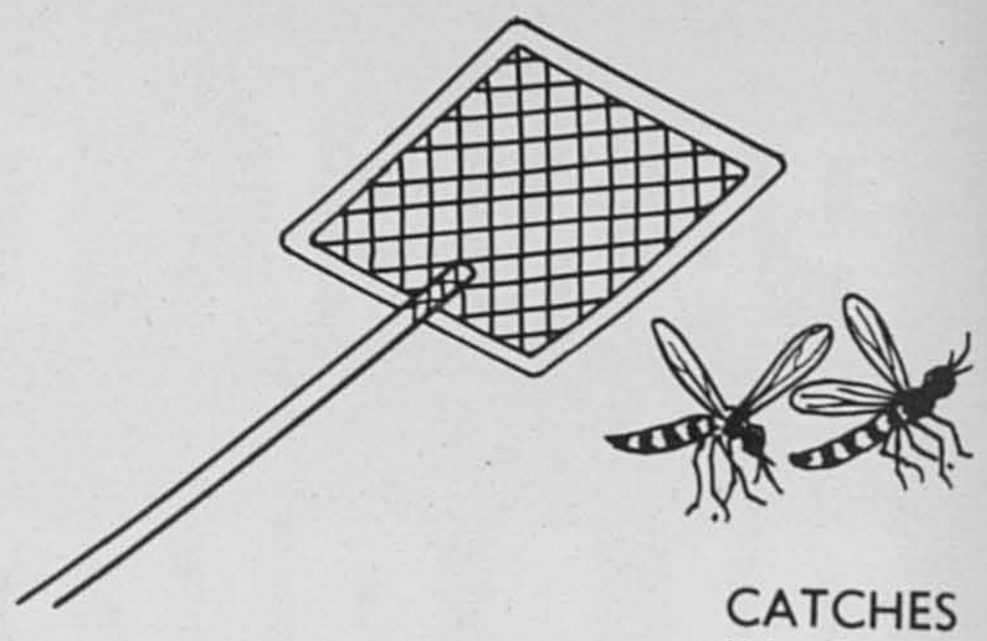
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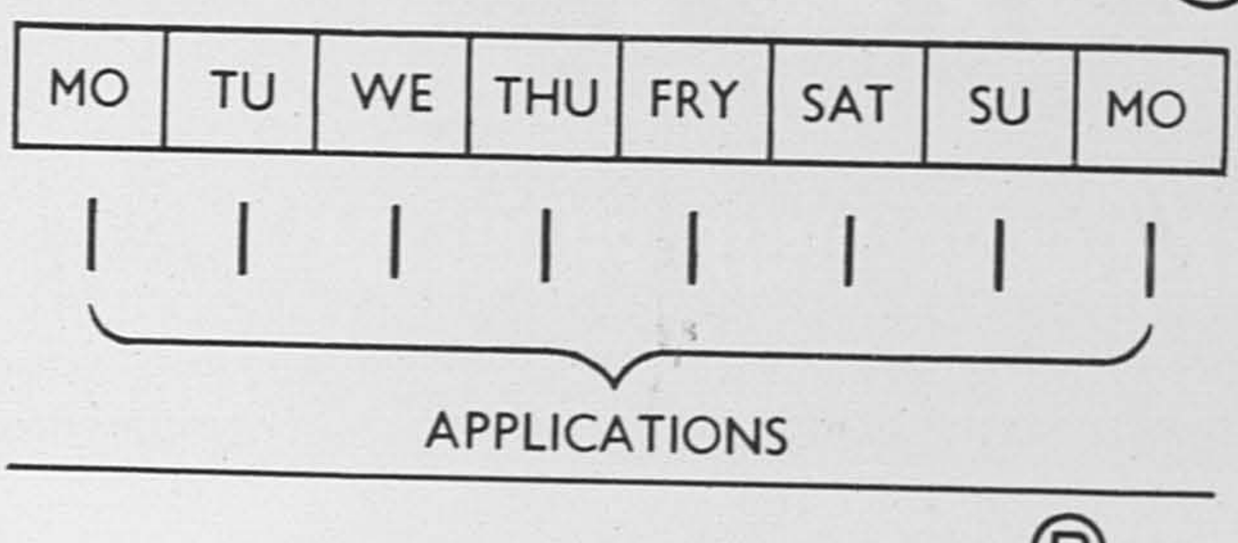
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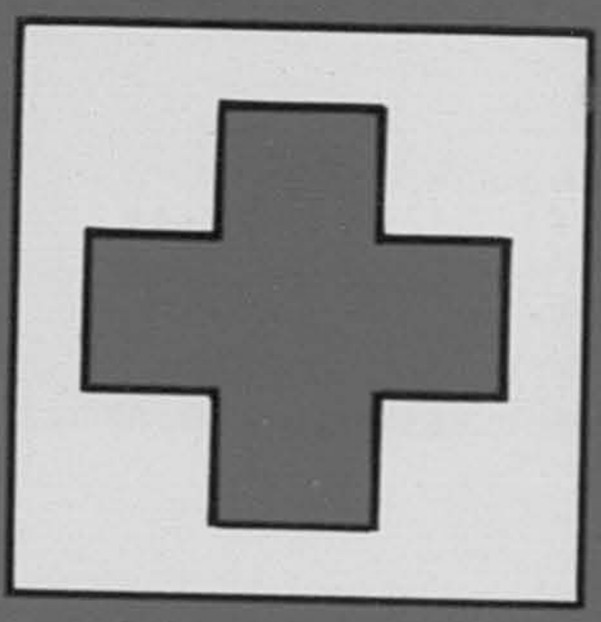
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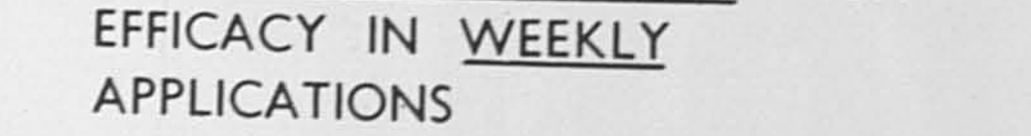
AGAINST MOULDY ROT HIGH EFFICACY IN WEEKLY APPLICATIONS

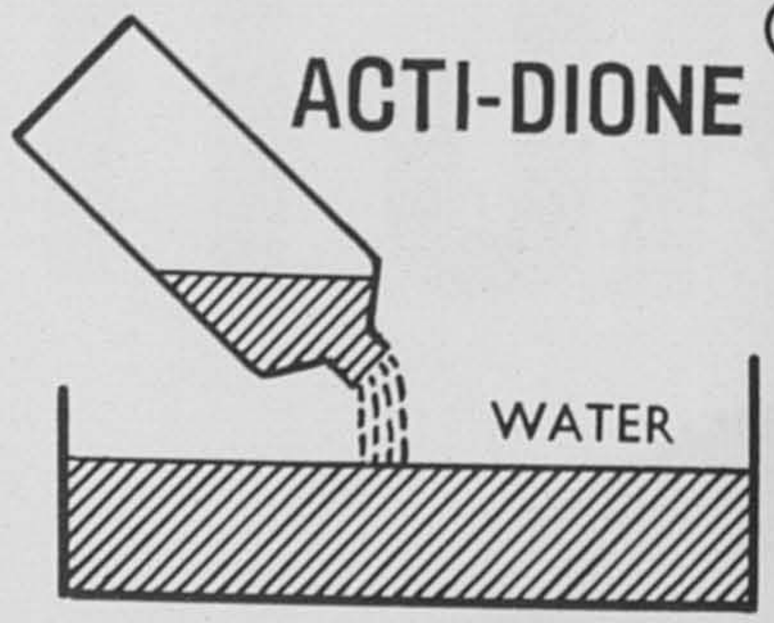


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Saturday

A cloudy day though it hardly rained at all; work was offered to the workers and about 80% turned up. The Medical Officers continued to inoculate workers throughout the day, visiting our lines and giving advice; but some workers and their families refused to accept inoculation. We had no power to force them and hope no cases will turn up at a later date.

Along the main road to Kemaman, at Sungei Pinang, flood waters were still about 8 feet deep.

Sunday

We have now been marooned for 15 days, but the situation is much improved.

After completing their jobs the Medical Officers were sent to Ayer Puteh and the police launch took them to Kemaman.

About 80% of our labourers turned up for work and F.F.B. started to come in to the factory by evening. However we were still cut off as water was still about 5 feet deep on the main road. We hope that tomorrow we will be able to get to Kemaman either by Land Rover or by boat. Rainfall recorded to-date during the past 15 days was 26½ inches; we trust that this is the end of our monsoon report for 1970/71.

"Yesterday is experience, Tomorrow is hope, Today is getting from one to the other as best we can".

(Readers Digest)

Industrial Relations: Contd from page 119

(b) A tapper and his wife from an estate in Kulim, Kedah reported that they were given one month's notice. They protested and asked to be taken back. Following investigation by an officer from the Labour Ministry they were told that they allowed their son to help them in tapping without the permission of the management and in spite of repeated warnings. Also they had not finished their panel marking. Both tappers admitted these faults and the management agreed to take them as *ganti* tappers pending vacancies in permanent tasks.

SUMMARY OF STRIKES

Brought forward from last month (November)	...	Nil
Strikes during the month	...	2
Settlement during the month	...	2
Not settled at the end of the month	...	Nil



The protectors

The increased demand today for electrical power plus the need to reduce the length of distribution cables has resulted in the possibility of fault levels beyond the designed capacity of existing equipment. BRUSH HRC fuse links are designed to the new B.S. 88 1967 Category of Duty AC80 which corresponds to a prospective fault current of 80,000 amps at 415 volts.

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Uplands School:

EASTER TERM 1971

Half-way through the academic year and shrouded in mist again. These last few days of rain have been very welcome after a long hot dry spell.

The story of Uplands seems to change little over the years.

Numbers continue to fluctuate. We opened with approximately 101 children in September but now have 121. Numbers are always approximate as the total changes from day to day, with children coming and going on leave.

We are fortunate in having a most excellent staff. Miss Ford has been appointed Deputy Principal. A just reward for her teaching skill, enthusiasm and hard work. We had a normal crisis in September but the Gods were kind to us and we now have two new teachers, Mrs. E. Mahon, teacher-in-charge of Hillview and Mrs. Kee Hup Seng teaching Grade 3. Both are tremendous assets, being lively characters. Thank heaven the staff have a sense of humour which tides us over a number of dramas.

The Railway on whom we are so dependent is as undependable as ever. Their clocks are set to "Penang Hill Railway standard time", and seldom match ours. We had to battle against a milling throng of tourists over the Pesta, local school holidays and Chinese New Year. Maybe it is the result of living such isolated lives, but one and all dread battling against the "madding crowd".

Buildings at Uplands are constantly being used for different things. Large labels ensure that all remember that Room 14 is no longer the Scout room as it was last term, or the Games room as it was the term before, but is now "Junior Boys Dorm". The most popular move was utilizing "Haunted Dormy 11" as a Club House. Uplands Club is run by the childrens' own elected Committee; they organize the library, competitions and special functions. The noise is sometimes fearful, with a record player blaring out the latest pop songs. You see the childrens' feet tapping the rhythm as they read in a corner, dress up, play table tennis, carrum, darts, football, monopoly, etc. The Club was a God-send last term when we had so many wet days.

I hope life in the classroom is not the drudge it was in our time. A modern approach has been adopted which encourages children to think for themselves; to discover rather than be told. We are implementing a Modern Maths Syllabus. Most teachers have had to do some quick research, as the scope is tremendous.

Decimal currency and the metric system don't come naturally to many of us. The children are revelling in it, and one frequently sees a couple outside with stop-watch, surveyor's tape or spirit-level doing complicated work, which is so much more meaningful to them than pages of long division.

To many parents it comes as a surprise that their children actually enjoy boarding school. Granted childrens' worries are as great to them as major catastro-

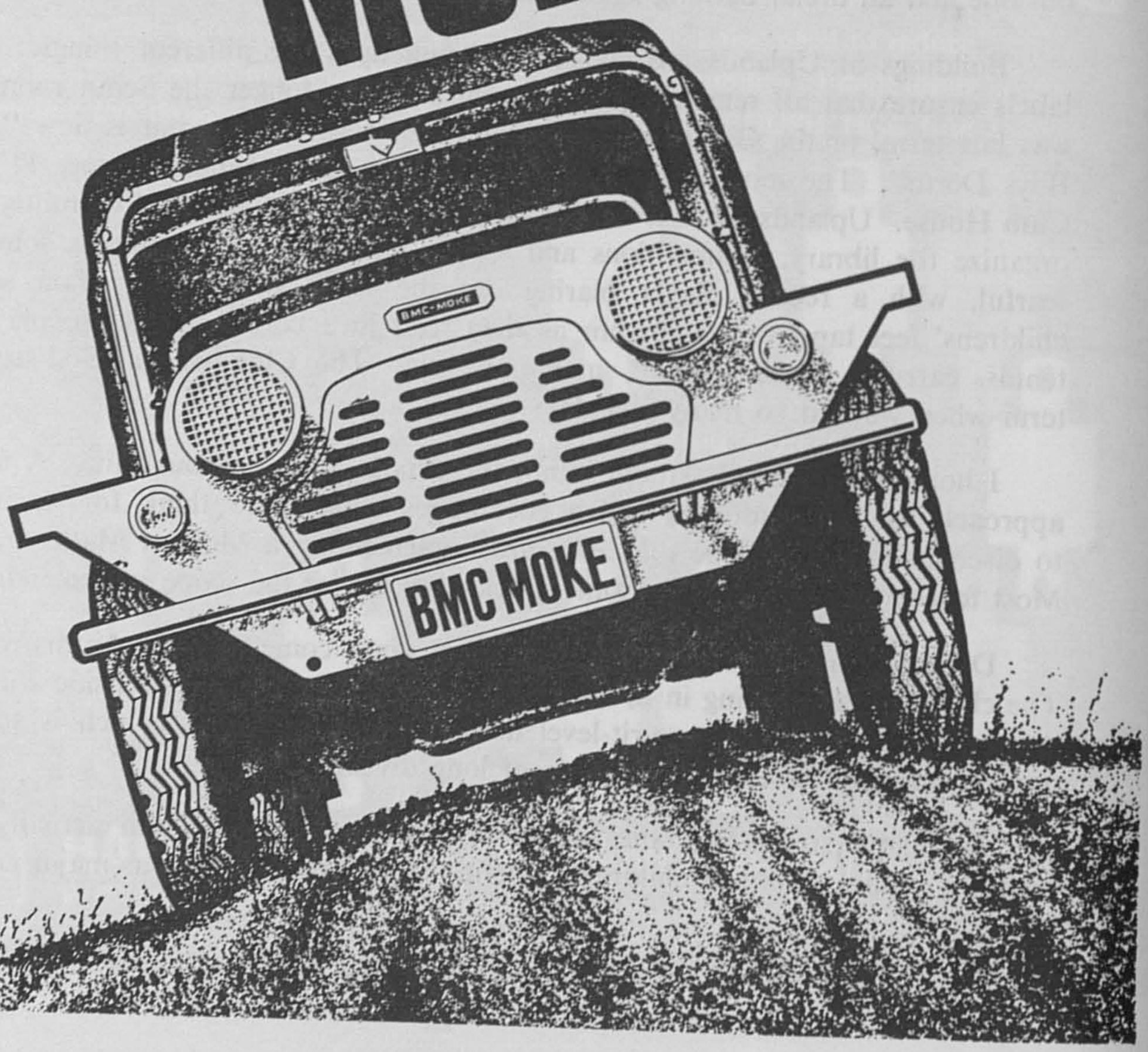
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phies are to us. That Jane is no longer Mary's best friend, or John has sixteen more marbles than Fred, can be most upsetting. Fortunately childrens' worries are short-lived. In a recent survey the main "hates" of boarding school were (a) not being able to bring bicycles, (b) Gula Malacca, (c) always having to carry raincoats when it so seldom rains.

I close with some rather deep thoughts from Grade 5 on how to make the world a better place.

1. Stop all hippies because they take drugs.
2. Ban making guns and stop all wars.
3. Find a cure for cancer.
4. Try to find food from the sea.
5. Don't build flats too close together so that all can have gardens.
6. Invent cars that run on dust and thus cut down pollution.
7. Make buildings strong enough to withstand floods and earthquakes.
8. Make all bosses good, and all work fun.
9. Find a way to stop Typhoons, Hurricanes, Floods and Earthquakes.
10. Make all Christians attend one church and stop arguments as to which religion is the greatest.

If this list is any indication of the ideas of the growing generation, then I don't think we oldies have anything to fear.

EILEEN P. SHOTTON.

1st March, 1971.

Information about Uplands School may be obtained from:

The ISP Schools Association
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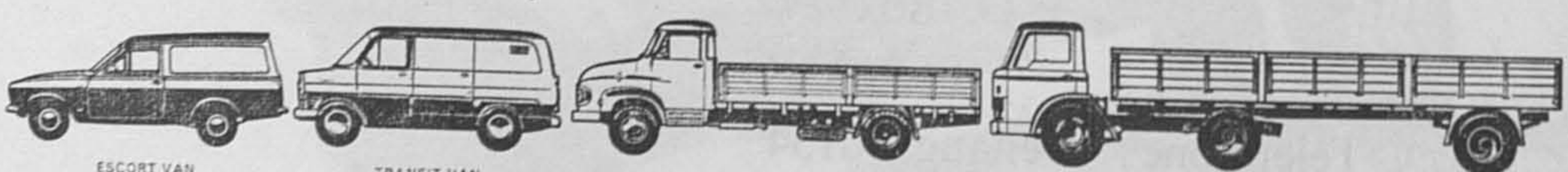






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Industrial Relations:

Translated extracts from *Penyata Bulanan, Disember 1970* published by *Kementerian Buroh, Malaysia* to whom acknowledgements are made.

1. The Month in Review

There was a feeling of uneasiness in the industry with the continued fall in rubber prices from 54¢ a lb (R.S.S. No. 1) (2nd December, 1970) to 48¾¢ per lb (30th December, 1970).

2. The Employment Situation

(a) *Unemployment*

The owner of a rubber estate (349 acres/86 workers) in Sitiawan, Perak gave two weeks notice to his workers at the end of December 1970 as he intends to sell the estate.

(b) *Insufficient Labourers*

A rubber estate in Ulu Bernam, Selangor (1 600 acres/169 workers/ NUPW/not MAPA) had vacancies for 50 tappers and 20 weeders. The people in the neighbouring kampongs did not wish to work in the estate because it is situated about 4 miles from the main road in a hilly area and the lines are far inside.

(c) *Surplus Labour*

As more than 200 acres of old rubber have been replanted, 60 labourers in a rubber estate (1 684 acres/311 workers) in Bahau, Negri Sembilan will be redundant in January 1971. The manager has written to the labour office in Seremban with the suggestion that they be sent to Sabah.

3. Interesting Conditions of Employment

I. Examples of good income given by an Oil Palm estate (3 091 acres/215 labourers) in Johore for the month of November 1970:

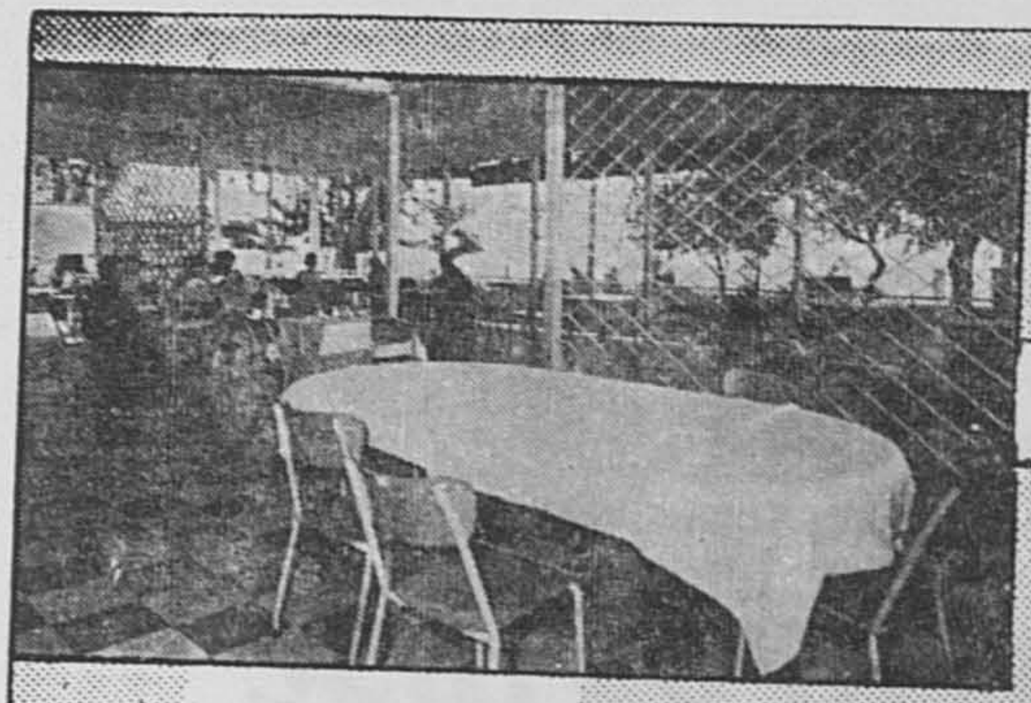
Men:

(a) Loaders are paid $1/- per ton, without overtime, worked 27 days, total income $266.08.

(b) Harvesters $7.48 per ton, without overtime, worked 24 days, total income $284.52.

(c) F.F.B. lorry driver $4.55 per day with overtime (1½ times) worked 26 days, total income $235.04.

Continued on page 119



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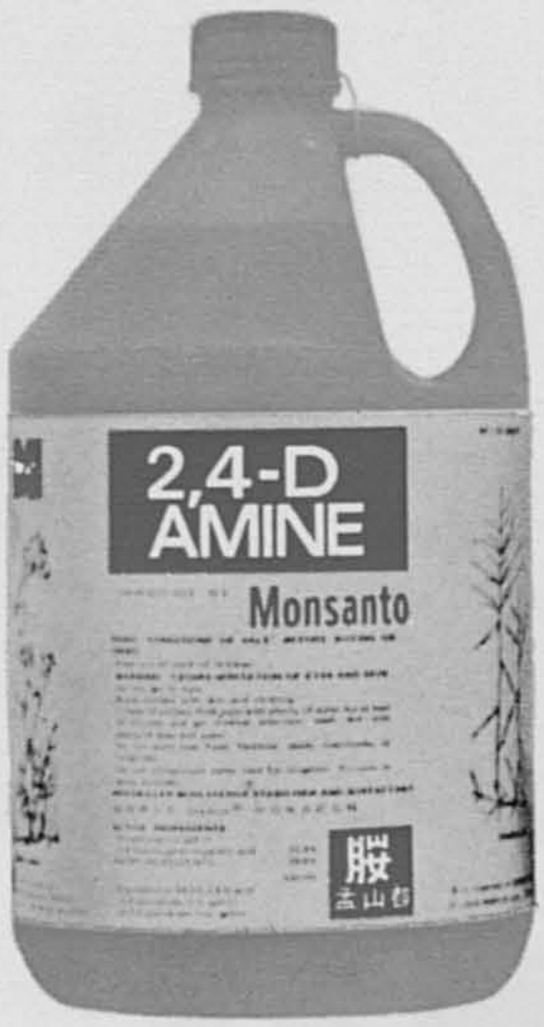
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Women :

(a) Carriers $7.48 per ton without overtime, worked 25 days, total income $160.65.

(b) Loose fruit collectors $2.85 per day with overtime ($1\frac{1}{2}$ times) worked 25 days, total income $140.96.

II. A tapper in smallholder's rubber (9 acres/1 labourer) in Tras, Pahang was paid 37% of the proceeds of rubber sales. He lived in Bentong (16 miles away) and went to work daily on a motor-cycle. In consideration of the distance he had to travel daily, the employer gave him all the proceeds from the sale of scrap. For November 1970, the tapper received $134.80 excluding the proceeds of scrap sale.

4. Law Enforcement

Labour Court

A case of $121.60 overtime allowances claimed by a lorry driver according to Section 60A(3) Labour Ordinance which should be paid for $118\frac{1}{2}$ hours overtime for the period of 1st August, 1970 to 11th November, 1970 was heard at the labour office, Muar, under Section 69 of the Ordinance. The defendant, the manager of a big rubber estate (8 749 acres/700 labourers/MAPA/NUPW) at Yong Peng, Johore, defended the charges on the grounds that as a lorry driver his working time was not rigidly fixed and he did not work continuously for 8 hours a day. The hearing officer gave judgement in favour of the complainant and instructed the defendant to pay the complainant $121.60. The instruction was carried out.

5. Disputes

A dispute arose at a rubber factory when the employer refused to pay the 3-days paid holidays to 25 workers when they did not turn up for work on 1st December, 1970 after the Hari Raya Puasa holidays. The dispute was settled when an agreement was reached on 16th December, 1970 between the disputants and the employer agreed to pay the workers for the 3 days holiday. The payment of the quarterly pay was withheld for the time being.

6. Industrial Court

(a) A tapper who has been working on a rubber estate in Serdang, Kedah since 1st April, 1955 reported that his employer stopped him from his work on 1st October, 1970 without notice.

When investigated, the employer concerned explained that the tapper had been stopped because his work permit expired on 30th September, 1970. When the permit was produced, it was found to have been renewed on 3rd October, 1970 to 31st March, 1971.

After lengthy discussion, the employer agreed to re-employ the tapper from 1st January, 1971 and pay compensation of $55/-.

Continued on page 115

Wyn Behenna is one of those lucky people who has a job she loves doing.

She runs BOAC's Escort service for groups of children travelling unaccompanied.

Wyn spent some time as a nurse before she joined BOAC. Then she became a stewardess. So she knows about children. And she knows about flying.

"Sometimes I feel a bit like the woman who lived in a shoe." The truth is. It doesn't matter how many children she has to look after, she always knows exactly what to do.

There's really only one qualification our Escorts need. They must like children.

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"Sometimes I feel a bit like the woman who lived in a shoe."



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London Letter:

THE STRIKE STILL WITH US

The Postal Strike is still with us and advantage has to be taken of kind friends who may be travelling to France for any overseas letters to be posted. So far the strike shows no signs of settlement although the debate in the House of Commons this week spotlighted every aspect and it is expected that further efforts will be made to settle it.

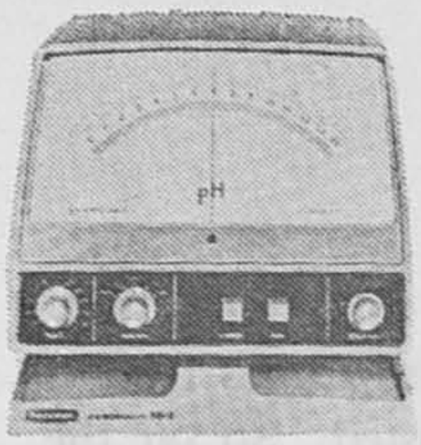
The debate itself may have contributed nothing towards a settlement but it did show the increasingly political nature of the strike and most people think that the strike is being adopted by the trade union movement as one of the spearheads of its attack on the Industrial Relations Bill and thus on Parliament itself. It is contrary to Parliamentary custom that the Opposition should insist on debating a current industrial dispute at all and it can only exacerbate the dispute. Meantime the Post Office is losing money every day and the latest position is that the banks have said they will stop a large part of their £10 million a year business with the Post Office. The pool firms have collectors, which is said to be paying off, and possibly this system will be kept up; and this again will mean a reduced income for the Post Office. Medically many people are suffering through the strike, and of course many families and friends have lost touch with one another.

Another big strike which is causing a terrific loss of business concerns the Ford Motor Company. This Company has rejected Britain as a site for a £30 million expansion project. Instead the engine building plant will be built abroad. This means a loss of some 4,000 jobs, which is very serious in these days of mounting unemployment. In fact we are not at all happy, and to date the inflationary tendency of the country shows no signs of abating and if this continues it means more unemployment and bankruptcies. As one expert says: inflation will not be stopped until all of us, instead of worrying about the size of this year's increase, are forced to worry about our jobs.

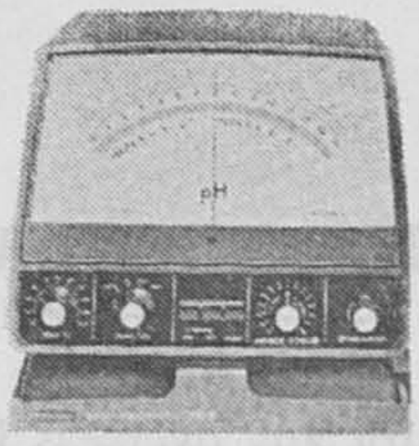
The other big issue in the country is the change-over to the decimal system. It is working pretty well and gradually we are coming to take the Government's advice to forget pounds shillings and pence and concentrate on decimals. It is a big temptation however, to work out how prices compare with our old money, but in time we shall forget this. Sympathy must be felt for all those who have had to introduce it to the public. Shopkeepers and their assistants have had and are still having a very hard time, and transport workers, especially the buses are coping wonderfully in a very difficult task. By the way, we are disappointed that the beautiful bronze colour of our new coins is disappearing and they are becoming tarnished already.

While speaking of finance one must record the troubles of Rolls Royce and its bankruptcy, which came as a shock to everyone. We had always regarded Rolls Royce as the predominate firm in the whole world with its outstanding engine skill and its beautiful motor cars. We still go on hoping that there will be a way out of their troubles.

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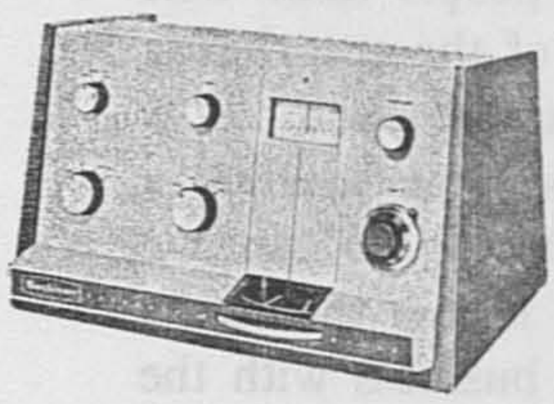
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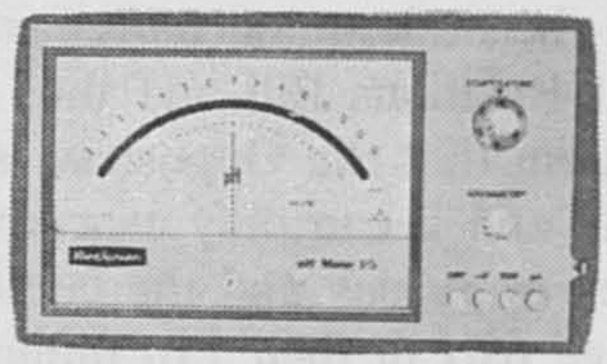
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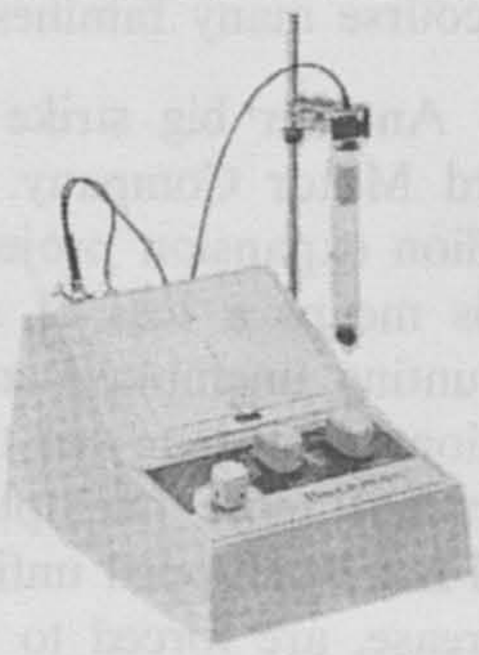
DIGITAL
pH METER



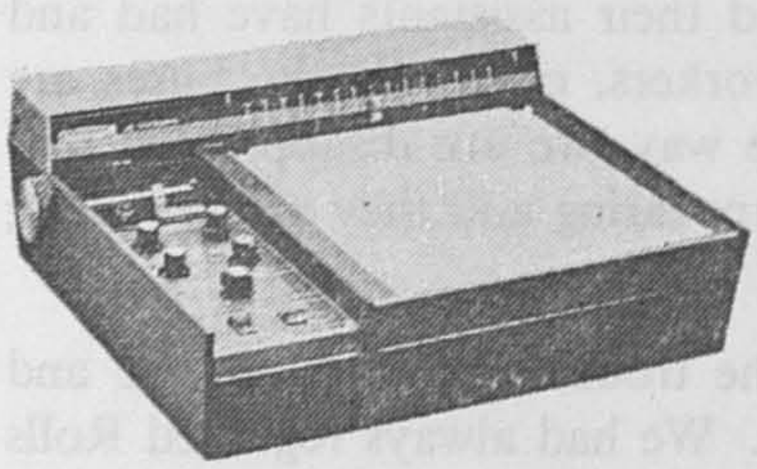
POCKET
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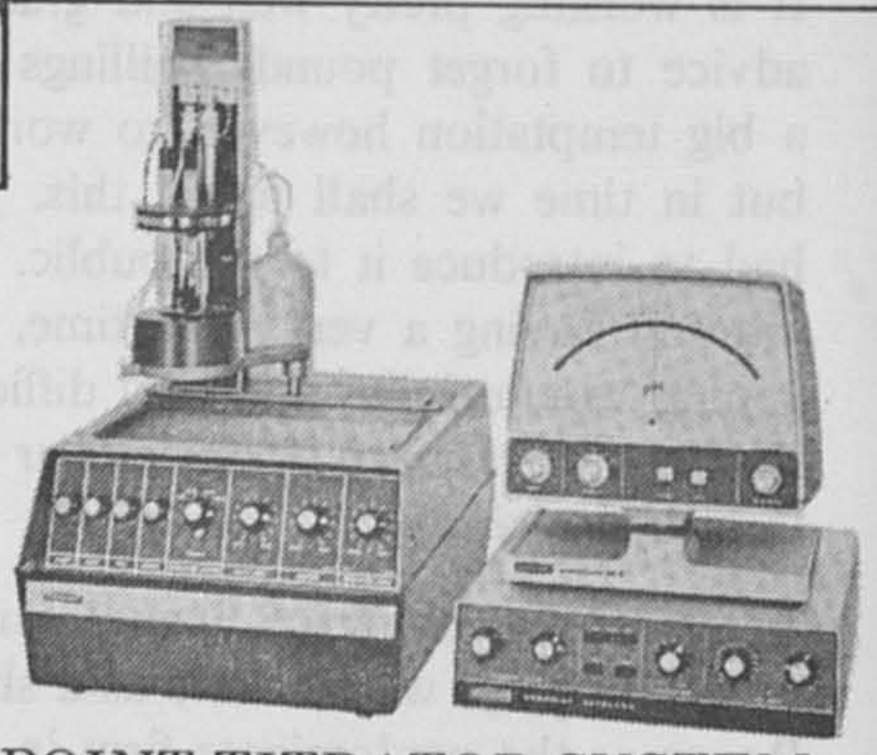
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Although attention is all on strikes and inflation at the present time there have been lots of happenings in the world during this past month. One must not forget the further successful trip to the moon by American astronauts. Such is human nature, there was not a great deal of publicity and presumably until their findings are examined we shall not hear much about the visit.

Perhaps one of the most important events so far as the world is concerned are the renewed efforts by Egypt to bring about peace with Israel. Up to the time of writing Israel is not happy about the demands by Egypt that she should withdraw to the pre-1967 borders and indeed they have been rejected by the Israeli Foreign Minister. Egypt would appear to have manoeuvred Israel into a predicament by accepting all the terms and implications of the 1967 U.N. Security Council resolution on a peace settlement, and now the world is waiting for Israel's reply. The War in Vietnam is worrying, and especially the trouble in Laos. There seems to be no end to this unhappy war and at the present time one cannot see a ray of light. Poland has also been having its troubles and its new leader Edward Gierek is fighting for survival as fresh unrest sweeps his country. Russia is very worried about the position there. Our Government is also worried about Russia and its spreading power and influence across the world which it mentions in a new published Government Defence White Paper. The Government has also announced its proposed sale of helicopters to South Africa and this may cause trouble. America by the way has had its internal troubles with earthquakes and tornadoes which resulted in heavy loss of life.

Sport has been interesting this last month. We managed to capture the Ashes in Australia after some exciting incidents and play and unfortunate injuries. Illingworth has shown himself an outstanding captain. We have had some good boxing with Alan Rudkin beating Italy's Franco Zurlo to become European champion. Joe Bugner who is soon to fight Henry Cooper was able to draw with Canadian Bill Drover, and it should prove an interesting match. We are all waiting breathlessly for the Muhammad Ali fight, the betting on which seems to be 50/50. Football is nearing the final of the Cup with its usual surprises the chief one being the defeat of Leeds by Colchester. During the month we had the inquest on the Ibrox Stadium disaster when about 70 people were killed.

With all our worries at the present time there have been a few lighter happenings. No doubt people in Malaya will be interested to know that the next issue of British passports will contain no details about colour of hair. This has come about through an M.P. having problems brought to him about people with dyed hair. With questions and letters he has persuaded the Government to do away with the colour.

Then there has been a letter from a woman written to the *Daily Mail* saying her husband only praised her driving once—when on taking him home at night her car broke down outside a public house!

Watney and Powell.

London, February 23rd, 1971.

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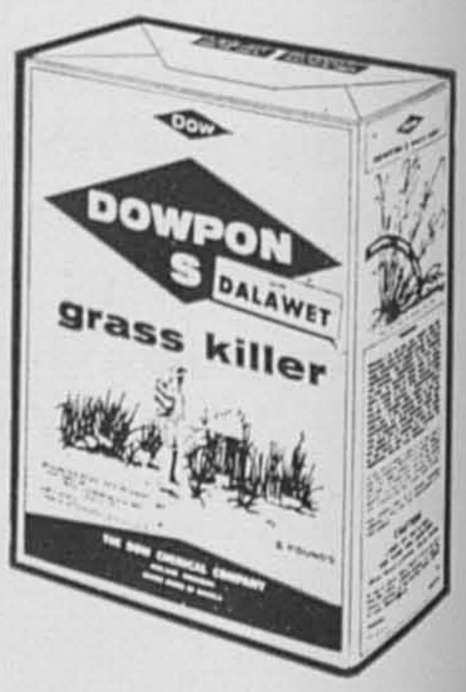
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AGRICULTURAL SCIENCE EXAMINATION

Botany Section — 5th February, 1971

Time: 1½ *Hours*

ANSWER FOUR QUESTIONS

(1) Describe the internal anatomy of a woody stem showing a considerable amount of secondary thickening. Point out the function of the various tissues which you mention.

There were few attempts at the question but the answers were reasonably well done. No one mentioned growth rings and their significance.

(2) Give an account of the structure and function of roots showing primary development only.

Many candidates stressed the function of roots and disregarded the structure and no one mentioned the difference in structure between monocotyledonous and dicotyledonous roots.

(3) What are the functions of the leaves of plants? Do you think that there would be any difference in structure and function between the leaves on the lower branches and those on the upper branches of a single tree?

Most candidates thought only of respiration and transpiration as leaf functions but the better answers included notes on some of the leaf modifications which occur in many plants and which are also associated with leaf functions.

(4) Explain how water and mineral salts are absorbed by a plant. What is the function of water in plant tissues?

This question was not well answered and candidates showed very little knowledge of water absorption. Most answers stressed the functions of water in a plant.

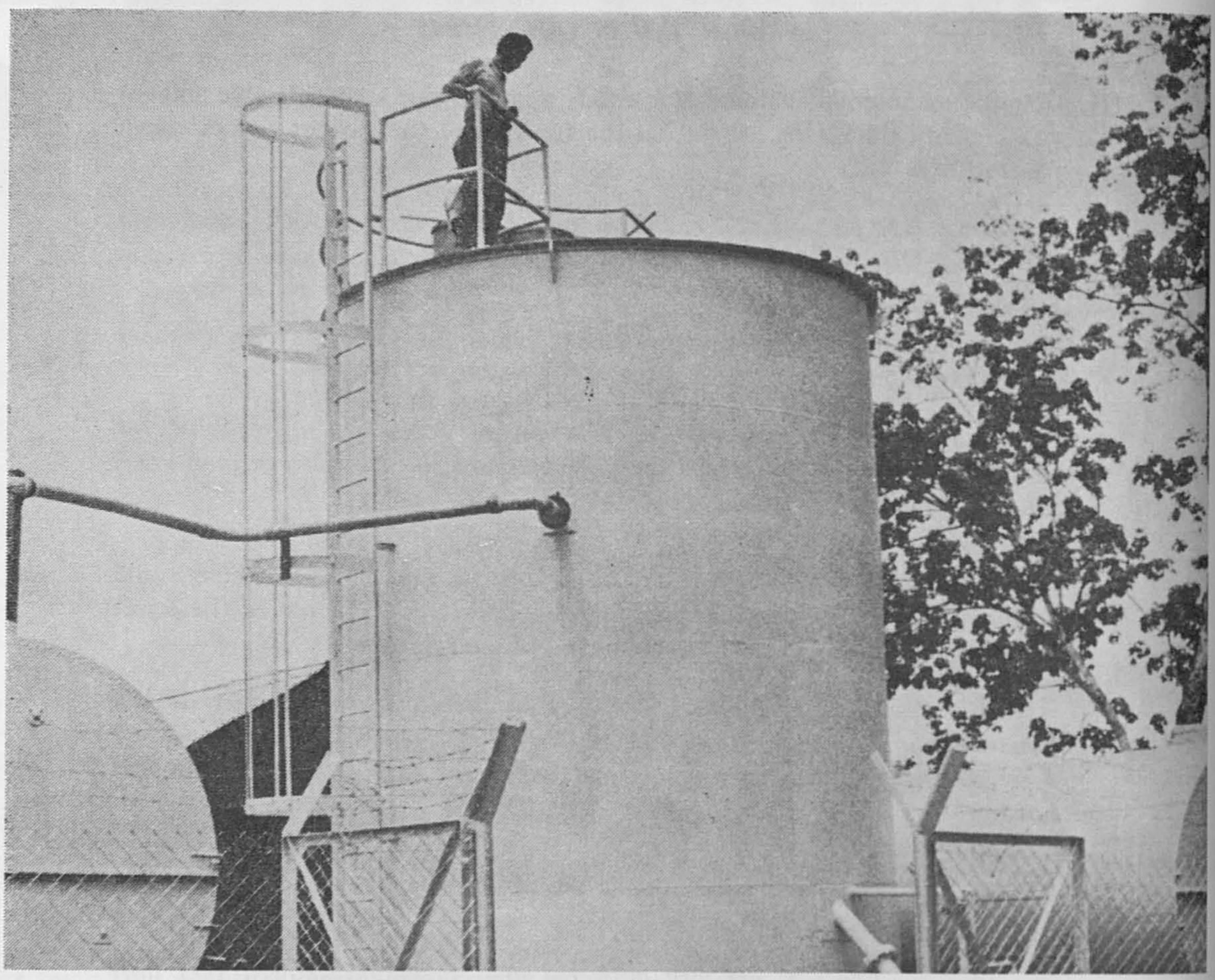
(5) Write *short* notes on any *five* of the following: —

(a) Germination
(b) Chlorophyll
(c) Mycelium
(d) Spore
(e) Cover crop
(f) Latex
(g) Bacteria
(h) Stomata

All candidates attempted this question but it was not well answered. Answers to such question need a reasonable number of facts presented as briefly as possible.

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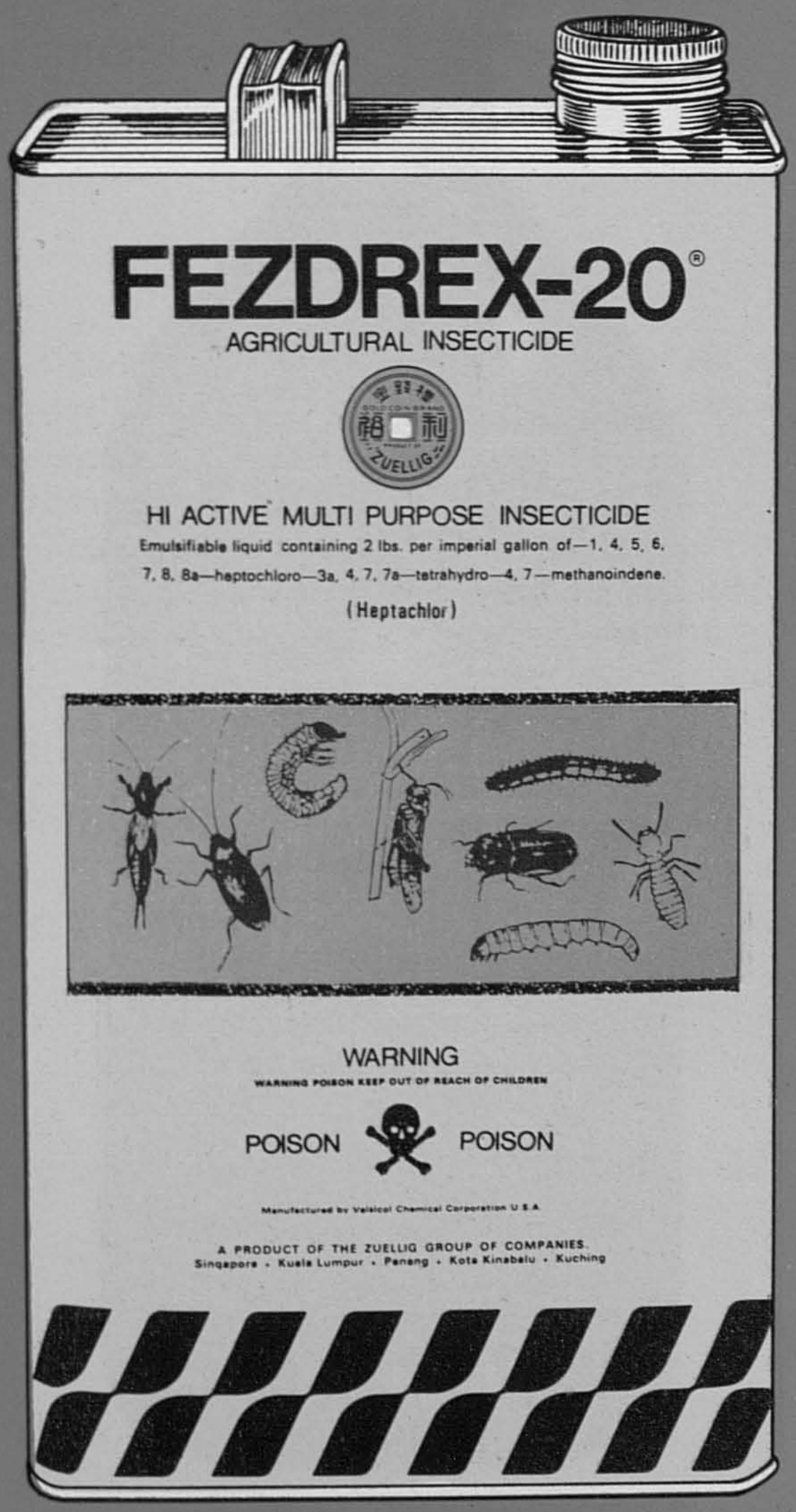
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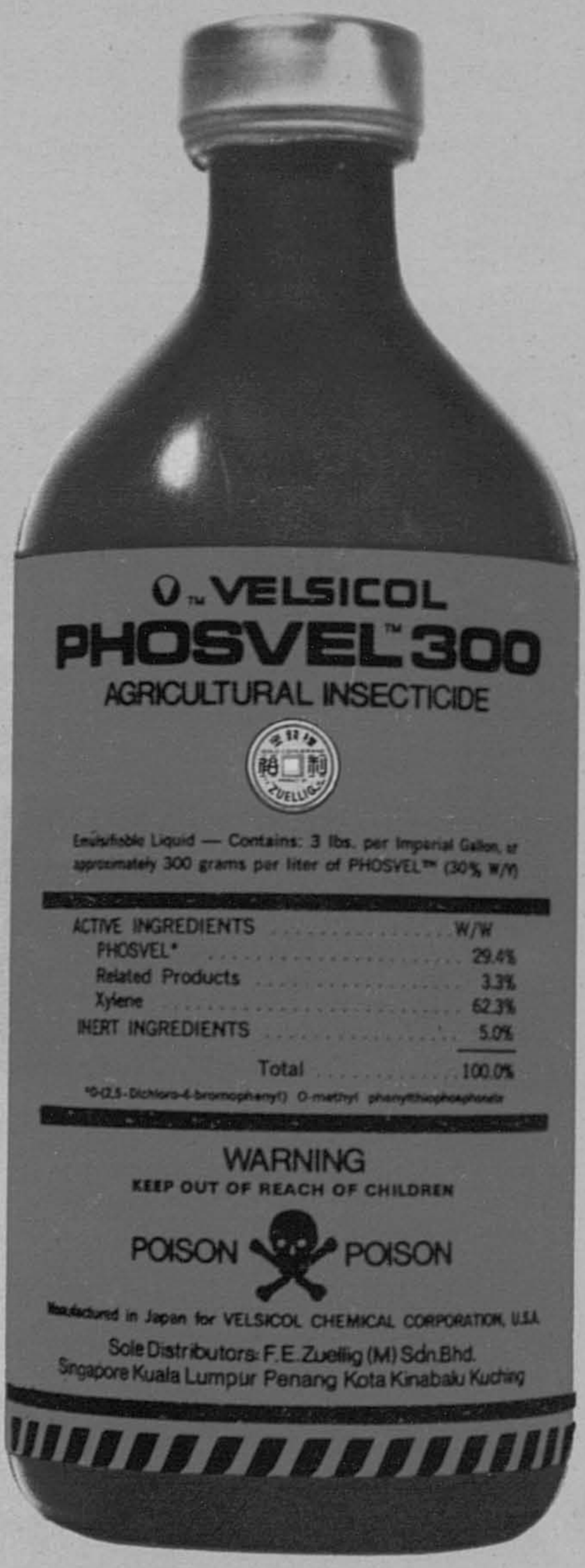
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(6) Write a short essay on fungi and their importance in agriculture.

Very poor answers were given to this question and in many cases it was the last question attempted so that time as well as lack of knowledge were responsible for the poor results.

---

9 candidates sat this examination with the following results: —

N. Arulampalam	(Central Perak)	Passed
Lim Hua Son	(North Perak)	,,
Syed Abdul Rahim bin Syed Mohamed	(Selangor)	,,

EXAMINER'S COMMENTS

In general candidates tend to answer one or two questions well and then seem to have exhausted their knowledge of botany. This is very disappointing and candidates should remember that each answer carries twenty-five marks. Two poor answers can very seriously reduce the total number of marks and cause failure. The good answers would need to be almost perfect in order to redeem the poor answers. In some cases the questions are not read correctly and answers are therefore irrelevant but in other cases the poor answers are quite simply a lack of knowledge.

The next examination in Agricultural Science (Botany and Soils) will be held on Friday, 18 June 1971

Entries close on Friday, 28 May 1971

I. S. P.

ESTATE BOOK-KEEPING EXAMINATION

18th December, 1970

Time: 2 Hours

The maximum marks for each question
are shown in brackets

Candidates are required:

(a) To answer all Questions.

(b) To start each Question on a fresh sheet.

(c) To arrange answers in numerical order of the Questions.

(1) Describe an effective system of stores control and give a specimen of each form you would use.

(25)

(2) On checking the estate cash book with the bank statement at 31st October, 1970, you find the following differences: —

(a) Cheque payments for $200 and $160 have not been debited by the bank.

(b) A cheque payment shown in the cash book as $180 was debited in the bank statement as $108.

(c) A transfer of $600 from Head Office was credited in the bank statement on 31st October, 1970 but was not shown in the cash book.

(d) The cost of a cheque book $10 had not been entered in the cash book.

(e) Receipts for road rental amounting to $350 had been entered in the cash book but had not been banked until 1st November, 1970.

The credit balance as per the bank statement at 31st October, 1970 is $3 460.

Draw up a bank reconciliation statement showing:

(i) the balance as per the cash book before adjustments, and

(ii) the balance as per the cash book after making any necessary adjustments.

(15)

(3) What do you understand by the expression "suspense account"? Give four examples, as different as possible, showing by journal entries how each example would be used.

(20)

(4) Draft a suitable ruling for a daily paid factory checkroll, filling in all the usual details for one employee for one month.

(10)

(5) State, giving reasons, to which account in an estate's books, the following payments should be debited: —

(i) Tapping Cups.

(ii) Contributions to E.P.F. or other Provident Fund.

(iii) Replacement tyres for Estate Lorry.

(iv) Manure.

(v) Advance to Contractor.

(15)

(6) (a) Define Capital Expenditure.

(b) Define Revenue Expenditure.

(c) State whether the undermentioned items are of a Capital or Revenue nature, giving your full reasons: —

(i) Replacement Land Rover.

(ii) Registration fee for the Land Rover.

(iii) Insurance for the Land Rover.

(iv) Number plates for the Land Rover.

(v) Road Tax for the Land Rover.

(15)

---

14 candidates sat this examination with the following results: —

L. Subramaniam	(Lower Perak)	Passed
Ti Teow Eng	(S. Trengganu/E. Pahang)	,,
Yang See Chuan	(Selangor)	,,
M. Balagangadaran	,,	,,
T. Krishnasingam	,,	,,
Joseph Lopez	,,	,,
Tan Seng Yeang	,,	,,
K. Seeveneserajah	,,	,,
Mohd. Annuar bin Abdul Kadir	(South Johore)	,,
A. C. Bugatt	(Sabah-Tawau)	,,

SOCIAL AND PERSONAL

ON LEAVE

5452 Wastie, R.L. (Dr.), 35, Quartermile Rd., Godalming, Surrey, England. (Selangor)—20/3/71

RETURNED FROM LEAVE

4416 Angus, A., Kelan Estate, P.O. Box 103, Kulai, Johore. (S. Johore)—18/2/71

4817 Kit Thien Looi, Ranchangan Pulau Semporna, L.K.T.N. Sabah, P.O. Box 117, Semporna, Sabah. (Sabah–Tawau)—26/2/71

4498 Willis, P.G., Sungei Senarut Estate, Batu Anam, Johore. (N. Johore)—7/3/71

CHANGE OF ADDRESS

4958 Bell, Ivan., c/o P.O. Box 352, Piasau Road, Miri, Sarawak. (Selangor/Sarawak)—23/2/71

5218 Basnayake, V.S., Peranchangan Cocoa Scheme, P.O. Box 1253, Sandakan, Sabah.

4372 Chua Hood Chuan, P.J.K., J.P., A.I.S.P., Trengganu Development & Management Berhad, P.O. Box 10, Kemaman, Trengganu. (S. Trengganu/E. Pahang)—15/2/71

4204 Campbell, T.J., Regent Estate, Batang Malaka, Negri Sembilan. (N. Johore)—22/2/71

5542 Duffield, B.T., N.C. James & Associates, Mah Sing Building, Mezzanine Floor, 112–114, Jalan Pudu, Kuala Lumpur. (Selangor)—5/3/71

4642 Gathorne-Hardy, S., Linsum/Terentang Estate, Rantau, Negri Sembilan. (N. Johore/Negri Sembilan)—5/3/71

5342 Hoo Siang Kam, A.I.S.P., Lenggeng Estate, Semenyih, Selangor. (Negri Sembilan/Selangor)—10/3/71

5157 Ibrahim b. Hj. Hassan Raof, Lendu Estate, Alor Gajah, Malacca. (N. Perak/Malacca/Muar)—23/2/71

4742 Kwan Yin Nein, Bee Yong Estate, Mentakab, Pahang. (W. Pahang)—4/3/71

4878 Lee Beng Huat, Lepan Kabu Estate, Kuala Krai, Kelantan. (N. Johore/Kelantan/Trengganu)—22/2/71

5200 Lee Beng Hye, Bukit Tunggu Estate, Bangi, Selangor. (Kedah/Penang/Selangor)—1/2/71

4492 Lean Theam Lye, Sepang Estate, Sepang, Selangor. (Negri Sembilan/Selangor)—8/3/71

3919 Morris, Moulay Idris (Haji), A.M.N., 285-B, Jalan Ampang, Kuala Lumpur. (C. Perak/Selangor)—2/3/71

2777 Robertson, James, Flat 2, Block A, Kappara Court, St. Julians, Malta. (Life member) —mid-March 1971

5465 Raj, V.G. Varath, Somme Estate, Serdang, Kulim, Kedah. (Negri Sembilan/Kedah/Penang)—10/3/71

4783 Sivengnandass, N., Sungei Choh Estate, Rawang, Selangor. (Selangor)—19/2/71

5530 Ti Teow Eng, c/o Nadefinco Ltd., P.O. Box 10, Kemaman, Trengganu. (S. Trengganu/E. Pahang)—15/2/71

5428 Teoh Chein Hun, Pengerang Estate, Pengerang, Johore. (S. Johore)—25/2/71

5379 Hew Kwee Fook, Anthony, West Estate, Carey Island, Port Swettenham, Selangor. (Negri Sembilan/Selangor)—8/3/71

5235 Kannan, S., 28, Kampong Station, Kuala Kangsar, Perak. (N. Perak)—9/3/71

5303 Meor Hisham bin Haji Meor Mohd. Yusof, Eldred Estate, Bekok, Johore. (Selangor/N. Johore)—25/2/71

4698 Matupang, L.P., Batu Lintang Estate, Serdang, Kedah. (Kelantan/Trengganu/Kedah/Penang)—8/3/71

5641 Lim Seng Mew, Seafield Estate, Batu Tiga, Selangor. (Selangor)—12/3/71

3491 Macpherson, D.A., A.I.S.P., Segamat Estate, Segamat, Johore. (N. Johore)—31/3/71

4980 Teng Wee Hing, Temiang Renchong Estate, Panchor, Muar, Johore. (Negri Sembilan/Malacca/Muar)—13/3/71

NEW MEMBERS

5725 Saffree Sulong, Semporna Island Settlement Scheme, P.O. Box 117, Semporna, Sabah. (Sabah–Tawau)

5727 Hoare, D.R., Sepang Estate, Sepang, Selangor. (Selangor)

5728 Boon Chuan Seng, Daniel, Shopwell Rubber Estate, 4-A Ayer Bemban, Kulai Road, Kulai, Johore. (S. Johore)

5729 Peters, E.W., Regional Office Schemes, P.O. Box 1253, Sandakan, Sabah. (Sabah–North East)

5730 Leong Ah Soo, Batu Lintang Estate, Serdang, Kedah. (Kedah/Penang)

5732 Cheong Sian Oon, Craigielea Estate, Bukit Pasir, Muar, Johore. (Malacca/Muar)

5733 Mohtar bin Abdul Hamid, Ulu Bernam Estate, Ulu Bernam, Perak. (L. Perak)

5734 Tan Chong San, Apas Balung Scheme, P.O. Box 359, Tawau, Sabah. (Sabah–Tawau)

5735 Choo Ann Lock, Francis, Hoechst Malaysia Sdn. Bhd., P.O. Box 540, Kuala Lumpur. (Selangor)

5736 Mainstone, B.J., Dunlop Research Centre, Batang Malaka, Negri Sembilan. (Negri Sembilan)

5737 Oyebog, M. Oki, C.D.C. Head Office, Bota—Victoria, West Cameroon. (Overseas)

5738 Ray, J.B., No. 7, Main Road, Bahau, Negri Sembilan. (Negri Sembilan)

5739 Menon, C.S.U., Sengkang Estate, Port Dickson, Negri Sembilan. (Negri Sembilan)

5740 Guha, M.M. (Dr.), Agricultural Research & Advisory Bureau, No. 387A, Jalan Ampang, Kuala Lumpur. (Selangor)

5741 Chandran, R., c/o P.O. Box 10, Kemaman, Trengganu. (S. Trengganu/E. Pahang)

REJOINED

5103 Henderson, W.P.B., 'Ilushin Estate', c/o Nigerian Joint Agency, P.M.B. 1082, Apapa, Lagos, Nigeria. (Overseas)

5226 Ng Chai Teo, Sepong Estate, Kota Kinabalu, Sabah. (Sabah–N. East)

RESIGNED

4580	Foo Chow Len	(Central Johore)	Left Planting
3335	Milne, D.J.F.	(Overseas)	,, ,,
4975	Rajah, R.T.	(Kedah/Penang)	,, ,,
3602	Lightfoot, D.H.	(Malacca/Muar)	,, ,,
3270	Hackney, G.R.	(Negri Sembilan)	,, ,,
5375	Mohd. Fadhir	(West Pahang)	

LIFE MEMBERS

4625 Stiles, J.P., A.I.S.P., Links Cottage, 84 Newport, Lincoln, Lincs., England.

4444 Kalimuthu, M., 2326, Caledonia Road, Caledonia Estate, Nibong Tebal, Province Wellesley.

2777 Robertson, James, Flat 2, Block A, Kappara Court, St. Julians, Malta.

AWARDS

CONGRATULATIONS TO:—

MR. CHUA HOOD CHUAN, P.J.K., A.I.S.P., on his being made a Justice of the Peace by the Sultan of Trengganu at an investiture ceremony at the Istana Maziah in conjunction with the Silver Jubilee of the Sultan's installation.

BIRTH

CONGRATULATIONS TO:—

DAY: To Moya and Bob a daughter Samantha Jane on 16th March, 1971, in the Assunta Hospital.

DEATHS

THANE: Colin P., passed away peacefully in Seremban Hospital, on 9th March, 1971.

SMITH: At Dundee on 2nd February, 1971 Anna Smith widow of James T. Smith formerly of Cairo and Madingley Estates.

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