

# United States Department of Agriculture Special Page

Bulletins and Special Articles Issued by the Government, of Interest to the Northwest; Suggestions Covering a Wide Range of Activities; Result of Federal Investigations, Etc.

## Double-Entry Books for Co-operative Societies

**D**ouble entry bookkeeping is urged upon all farmers' co-operative societies in a recent publication of the United States Department of Agriculture, Bulletin No. 178, "Co-operative Organization Business Methods." The very life of a co-operative organization, says the bulletin, depends upon the confidence its members possess in it, and such confidence is impossible unless the records are unmistakably accurate. The double entry system is the only one which affords a complete check and should, therefore, be adopted in all cases.

Since the co-operative organization acts as the agent of the grower in marketing his product, the books of the organization must not only contain the usual records of any business enterprise, but must also show a clear record of each grower's shipments. The system must be sufficiently elastic to take care of the maximum volume of business at the busy seasons and at the same time be economical.

The six essential requirements for such a system are stated in the bulletin as follows:

- (a) A complete set of financial records showing the business transactions and the results thereof.
- (b) A record of each member's transactions with the organization.
- (c) Capability of taking care of a maximum amount of business during the shipping season.
- (d) Capability of returning to the members the proceeds from their products within a reasonable time.
- (e) Clear pooling records when kept, so that any discrimination can be shown quickly.
- (f) Auxiliary records which will give statistics and valuable information for the conduct of the business. These records must be accurate.

The necessity for providing a regular system for safeguarding the cash is also emphasized in this bulletin, and nine precautions are given which it is said should be adhered to strictly.

(1) All entries of cash should be explicit, and items supporting such entries should be filed so that they are accessible for reference and verification.

(2) No entries should be recorded in the cashbook which do not relate to cash.

(3) The full receipts of each day should be deposited in the bank.

(4) All canceled checks should be filed in numerical order.

(5) Duplicate checks should always be covered by indemnity bonds.

(6) Reconciliation should be made each month between cash or check register and bank pass-book balances.

(7) Permanent record of these reconciliations should be made.

(8) Checks, sales slips, receipts, etc., should be numbered with a numbering machine. Any which are spoiled should be marked void and left in the book.

(9) A regular system should be used for the acknowledgment of all cash sales or miscellaneous cash items received.

The auditing of accounts also should receive more attention than is frequently the case. At least once a year an expert accountant should go over the books of the organization. To minimize the cost of this, small associations or circles can be formed by the organizations within a certain radius and a competent auditor can be engaged to do the auditing for all.

### Unnecessary.

A hungry customer seated himself at a table in a quick-lunch restaurant and ordered a chicken pie. When it arrived he raised the lid and sat gazing at the contents intently for a while. Then he called the waiter.

"Look here, Sam," he said, "what did I order?"

"Chicken pie, sah."

"And what have you brought me?"

"Chicken pie, sah."

"Chicken pie, you black rascal!"

The customer replied, "Chicken pie? Why, there's not a piece of chicken in it, and never was."

"Dat's right, boss—dey ain't no chicken in it."

"Then why do they call it chicken pie? I never heard of such a thing."

"Dat's all right, boss. Dey don't have to be no chicken in a chicken pie. Dey ain't no dog in a dog biscuit, is dey?"

## Potatoes Make a Good Substitute for Bread

**I**f wheat remains at its present high figure or continues to rise in price and if there is a corresponding increase in the price of bread, scientists in the United States Department of Agriculture suggest that the ordinary household will find it advantageous to eat more potatoes and less bread.

With potatoes at 60 cents a bushel, 10 cents worth—or 10 pounds—will give the consumer a little more actual nourishment than two one-pound loaves of bread at 5 cents each. The protein and fat are present in appreciably larger amounts in the bread, but the potatoes will be found to furnish more carbohydrates, and more heat units.

Carbohydrates (starch) contribute greatly to the energy value of any diet and since potatoes are rich in these, families that wish to expend their money to the best advantage are recommended to consider whether they cannot make a more extended use of them. They are easy to cook and when prepared in different ways can be made to lend variety to the Winter diet when green vegetables are hard to obtain.

Like other foods relatively rich in carbohydrates, however, potatoes should be eaten with foods correspondingly rich in protein, such as milk, meat, eggs, etc., and with foods like butter, cream and meat fat to supply the fat that the body needs.

Under normal conditions in Europe and America the potato ranks next to bread as a carbohydrate food. If prices change sufficiently to make it desirable from a financial point of view there is no scientific reason why potatoes should not be substituted to a great extent for bread.

In addition the potato like many fruits and vegetables, helps to neutralize an acid condition in the body. This is another reason for its being eaten in combination with meat, fish and other animal foods.

## Many Varieties From Native American Plum

**T**he wild North American plum has given rise to more cultivated varieties than any other of the native fruits except the grape. These varieties have mainly originated in the Mississippi Valley, Iowa alone having furnished 175, Minnesota 74, and South Dakota 44. In Texas 97 varieties have originated.

In these Western and Southern regions where several of the species appear to have reached their greatest perfection in the wild condition the greatest development in the future, under cultivation, may probably also be expected to take place, according to a new bulletin of the United States Department of Agriculture (No. 172) entitled "The Varieties of Plums Derived from Native American Species."

The new publication is a professional paper which should be of especial interest to the growers of fruit, particularly those engaged in plum breeding. It gives a list of native varieties and hybrids showing the origin of each variety and the species to which it belongs, which should be of considerable value to the nurseryman and orchardist.

With few fruits has there been an equal opportunity to report step by step the advance which has been made since the original of the first-named variety was planted and cultivated in a garden. The new bulletin, therefore, places on record a distinct achievement of American horticulturists who have developed a fruit the value of which was long overlooked.

### Foxy Pa.

"He is very popular with his wife of late." "And him such a flirt. How does he do it?" "She called him up the other day and said: 'Hello, darling,' and he recognized her voice and replied: 'You have evidently made a mistake; I am not your darling. I have the dearest, sweetest, most beautiful wife in the world, and she is the only woman I permit to call me darling!'"

## March Estimate of Grain Crops

**T**he crop reporting board of the bureau of crop estimate, from reports of correspondents and agents, estimates that the amount of wheat on farms March 1, 1915, was about 152,903,000 bushels or 17.2 per cent of the 1914 crop, against 151,809,000 bushels or 19.9 per cent of the 1913 crop on farms March 1, 1914, and the 156,483,000 bushels or 21.4 per cent of the 1912 crop on farms March 1, 1913. About 60.7 per cent of the crop will be shipped out of the counties where grown, against 53.9 per cent of the 1913 crop and 61.6 per cent of the 1912 crop so shipped.

The amount of corn on farms March 1, 1915, was about 910,894,000 bushels or 34.1 per cent of the 1914 crop, against 866,392,000 bushels, or 35.4 per cent of the 1913 crop on farms March 1, 1914, and 1,289,655,000 bushels or 41.3 per cent of the 1912 crop on farms March 1, 1913. About 18.6 per cent of the crop will be shipped out of the counties where grown, against 17.2 per cent of the 1913 crop and 21.8 per cent of the 1912 crop so shipped.

The proportion of the 1914 crop which is merchantable is about 84.5 per cent, against 80.1 per cent of the 1913 crop and 85.0 per cent of the 1912 crop.

The amount of oats on farms March 1, 1915, was about 379,369,000 bushels or 33.2 per cent of the 1914 crop, against 419,476,000 bushels or 37.4 per cent of the 1913 crop on farms March 1, 1914, and 604,216,000 bushels or 42.6 per cent of the 1912 crop on farms March 1, 1913. About 29.4 per cent of the crop will be shipped out of the counties where grown, against 26.5 per cent of the 1913 crop and 30.9 per cent of the 1912 crop so shipped.

The amount of barley on farms March 1, 1915, was about 42,889,000 bushels or 22.0 per cent of the 1914 crop, against 44,126,000 bushels or 24.8 per cent of the 1913 crop on farms March 1, 1914, and 62,283,000 bushels or 27.8 per cent of the 1912 crop on farms March 1, 1913. About 45.1 per cent will be shipped out of the counties where grown, against 48.4 per cent of the 1913 crop and 53.7 per cent of the 1912 crop so shipped.

## STOCKS OF WHEAT AND CORN ON FARMS, AND PRICES, MARCH 1, BY IMPORTANT STATES.

STATE.	WHEAT.					CORN.				
	Millions of Bushels.		Five Yr. Av.	Price, Cents.		Millions of Bushels.		Five-Year Av.	Price, Cents.	
	1915.	1914.		1915.	1914.	1915.	1914.		1915.	1914.
Pennsylvania.....	5.5	6.6	6.9	142	96	21.8	21.7	20.4	83	71
Ohio.....	8.0	9.8	8.1	141	92	45.7	54.1	60.6	73	63
Indiana.....	6.5	8.0	6.5	142	91	58.8	65.3	74.3	70	61
Illinois.....	5.6	7.1	6.2	134	87	99.0	101.6	150.0	68	60
Michigan.....	4.0	3.3	3.9	139	92	19.6	18.0	18.4	73	66
Wisconsin.....	4.9	1.8	1.1	132	82	18.9	24.7	18.7	71	59
Minnesota.....	10.3	19.7	17.5	126	83	26.4	33.6	37.2	62	50
Iowa.....	3.0	4.3	3.6	137	79	140.2	126.2	147.3	65	56
Missouri.....	6.9	6.7	5.5	137	87	58.0	58.4	71.3	70	72
North Dakota.....	15.5	15.0	20.0	134	80	2.7	2.2	1.4	67	57
South Dakota.....	6.9	9.2	10.0	128	78	2.4	2.0	1.9	62	54
Nebraska.....	10.9	12.7	12.4	121	74	1.3	2.4	64.3	94	60
Kansas.....	30.1	19.4	12.6	133	79	29.2	1.4	44.5	74	71
Kentucky.....	1.3	1.3	1.4	142	97	24.7	25.4	35.3	77	79
Tennessee.....	1.8	1.2	1.5	143	103	33.0	28.9	32.8	81	82
Texas.....	1.5	1.4	1.0	139	90	28.7	49.0	35.4	86	87
Oklahoma.....	4.8	1.4	2.1	130	80	10.0	9.4	19.2	83	75
Montana.....	3.5	4.8	3.4	120	65	0.2	0.3	0.1	..	..
Colorado.....	2.0	2.3	2.2	120	75	4.0	2.0	1.8	68	68
Utah.....	1.7	1.8	1.0	121	75	0.1	..	..	..	..
Idaho.....	2.4	2.7	2.0	122	67	0.1	..	..	..	..
Washington.....	5.0	6.4	6.3	128	77	0.2	0.2	0.1	88	71
Oregon.....	1.8	1.7	2.1	128	80	0.1	0.1	0.1	100	77
United States.....	152.9	151.8	156.6	133.6	83.1	910.9	866.4	1,026.6	75.1	69.1

## Soil Considerations for Grower of Apples

**D**epth of subsoil as a necessity for successful apple growing is strongly emphasized in a new bulletin of the United States Department of Agriculture (No. 140) which, although dealing primarily with conditions in Connecticut and Massachusetts, contains much information of value to orchardists all over the country.

The presence of unbroken rock, large ledges, or hardpan within three feet of the surface, the bulletin considers prohibitive, and a soil depth of at least six feet is almost a necessity. An even greater depth is desirable. There is also no foundation for the popular belief that the presence of stones is useful. Their only benefit is to loosen to some degree the excessive compactness of clayey, stiff soils which, however, are never the best fitted for fruit growing.

True hardpan, the bulletin points out, is not a clay loam which may under certain circumstances constitute a desirable subsoil, but is a mixture of sand, gravel, soil and clay with more or less cementing material which binds the mass together so that the movement of moisture in both directions is seriously impeded. Where hardpan is found close to the surface it can sometimes be broken up by the use of dynamite. This, however, is an expensive process and with the prevailing prices for good orchard lands, it will be better for the fruitgrower to select soil which does not require it.

The cultural methods employed in an orchard should always be flexible and adapted to the individual soil characteristics. It is better to adapt the varieties to be grown to the soil rather than to attempt to change the nature of the latter.

For any kind of orchard planting the soil should be deep, well drained, and friable, yet not so porous as to be droughty. The exact soil best suited to each variety of apple will depend largely, however, on such climatic factors as the range of temperature, the rainfall, the surface drainage, exposure, etc. If these climatic factors are unfavorable for any given variety the character of the soil will not make it possible to grow this fruit successfully unless it serves to offset the unfavorable conditions.

For example, apples ripen a little later on a northerly slope than on a southern one. They also ripen earlier on a sandy loam than on heavier soils. Thus a light soil on the north side of a hill may produce earlier fruit than a heavier one on the south side.

## Pack "Spuds" for South America With Due Care

**N**ew markets in South America opened by the war to potato growers in this country are being endangered by lack of care in packing and shipping, according to reports received by the United States Department of Agriculture. Before the war South America was supplied with its potatoes, in great measure at least, from Europe, and these orders have now been diverted to this country.

Federal inspectors stationed in New York who have inspected potatoes offered for shipment to see that they complied with the requirements of the importing countries, report, however, that because of the long voyage and the high temperatures encountered in the tropics, certain shipments from New York to Brazil and Uruguay have arrived in bad condition. Some of these potatoes were found to have been attacked by fungi causing a soft rot, and others which appeared perfectly sound externally were black in the center.

To obviate this difficulty, shippers are urged to take a few simple precautions. In sorting and packing potatoes for export through the tropics the following points should be carefully observed:

1. All badly bruised or cut potatoes should be thrown out.
2. Frosted potatoes should be excluded.
3. No potatoes that have even small spots of dry rot or that show the sunken discolored spots caused by late blight should be included.
4. Barrels should be well ventilated by cutting a liberal number of holes in their sides.
5. Shippers should insist that the potatoes be stowed in a cool, well ventilated part of the vessel.