

THE POPPY.

This is an old-fashioned flower to be sure, but it is none the less beautiful for all that. In fact there are a great many old-fashioned flowers that are very much more beautiful than some of the new sorts that are being annually introduced at exorbitant prices. The poppy thrives in nearly any soil and with but little care, and among the many different kinds some are truly beautiful and make a grand display in the flower garden. F. H. D.

SHRIVELLING OF GRAPES OR VINES.

The Cause and Remedy

BY P. H. HENDERSHOT.

In reply to the enquiry of your correspondent who wishes to know the cause of fruit shrivelling or drying up on grape vines which promised a good crop, vines growing on high dry soil. I should attribute it to two causes—First, the soil on which the vines are growing is naturally inclined to dry out badly. Second, the vines were too heavily burdened with fruit. There might be other causes; but in this case I feel quite confident that too much fruit and too little moisture explains the whole difficulty.

During the drought of last year which was without parallel in this locality, I had a few vines in my vineyard that suffered in the same way, but it was only such vines as were too heavily laden with fruit. Had there been more moisture they would no doubt have matured the fruit, yet not without injury to the vines.

The Remedy.—As early in the spring as ground is fit to work, pulverize the surface of the soil, and keep it so until August, and if vines show much fruit remove at least one third of it as soon as formed.

P. S.—In case ground cannot conveniently be kept pulverized by cultivation, mulching the ground will answer the same purpose.

Bertie Vineyards,
Stevensville, Oct. 28th, 1882.

Page 153 contains our Clubbing and Premium List. Study it.

STOCK.

ENSILAGE.

The following questions, which we take from the *National Farmer*, Washington, were forwarded by the department to various men in the country who had been experimenting with silos as a means of preserving green fodder for stock. As the matter is of much interest to farmers in Canada also we give the questions and as many of the answers as space will permit.

1. Location of silo with reference to feeding-rooms.
2. Form of silo.
3. Dimensions of silo.
4. Walls of silo—materials and construction.
5. Cover.
6. Weight—materials used for, amount required, and how applied.
7. Cost of silo.
8. Crops used for ensilage.
9. Method of planting and cultivation.
10. Stage of development at which fodder is most valuable for ensilage.
11. Weight of fodder produced per acre.
12. Kind of corn best for ensilage.
13. Value of sweet corn as compared with field varieties.

14. Preparation of fodder for silo—machinery used.

15. Filling the silo.

16. Cost of filling per ton of fodder put in.

17. Lapse of time before opening the silo.

18. Condition of ensilage when opened.

19. Deterioration, if any, after opening.

20. Value of ensilage for milch cows.

21. Effects of ensilage on dairy products.

22. Value of ensilage for other stock.

23. Quantity consumed per head.

24. Method of feeding—alone, or with other food.

25. Condition of stock fed on ensilage, both as to gain or loss of weight, and health.

26. Profitableness of ensilage, all things considered.

W. B. BENSON, *Cardinal, Canada:*

1. Adjacent to and connected with feeding rooms.

3. Four silos, each 20 feet 6 inches by 16 feet 3 inches. One 31 feet by 16 feet 3 inches; depth 20 feet 5 inches.

4. Stone wall, with mortar of sand, and water lime, 12 feet 8 inches high, double boards and plank 7 feet 9 inches higher to roof.

5. Plank 15 feet long 2 inches thick, crossed with short pieces 4 feet long, so that we can uncover 4 feet at once.

6. Loose stones of a convenient size for handling to the depth of about 2 feet.

8. Corn and sorghum.

9. 3 feet apart, harrowed several times, and cultivated as long as a horse can walk between the rows.

11. About 15 tons.

11. Cut corn about half an inch long. Used steam power.

15. Took about three days to fill each silo, having men and boys spreading and treading it.

16. Cost too much, probably \$1 per ton. Hope to manage better this year.

18. About 4 inches of it damaged near the top, (but the sheep ate a good part of it), and about 4 inches next the boards, above the stone work, was not very good, but the rest was highly relished by the stock.

19. Cut down about 4 feet in width at a time, going from top to bottom, leaving the plank and stones on the rest. No perceptible deterioration.

20. Prefer it to anything I have yet tried.

21. Could not detect any particular taste, either in milk or butter.

22. The steers that I fattened put on flesh rapidly, as the ensilage seemed to prevent them from getting feverish. The thoroughbred stock also liked it well, and their coats handled well.

23. The milch cows got about 50 pounds per day, the steers 40 pounds, and the thoroughbred stock from 25 to 30 pounds.

24. Fed the milch cows with oat straw part of the time once, and part of the time twice a day, giving them lots of it, and bedding them with what is left. Mixed bran and cotton-seed meal with the ensilage. The fattening cattle had a little hay, but preferred the ensilage mixed with ground oats, cotton-seed meal and bran.

25. Most satisfactory in all respects.

26. Am so well pleased with it that this year I have planted 51 acres of corn, and I hope to mix some clover with a part of it, as I put it into the silo.

JOHN P. BENT, *Maynard, Mass.:*

1. The silo joins the barn, with a door opening into the feeding-room. About half the depth of the silo is below the floor of the feeding-room.

3. 40x60x17 feet deep.

4. Nine feet of the walls are stone cemented on the inside, and the remaining eight feet concrete and stones. One side is a bank wall, the ground

being graded to the top.

5. One and a half inch plank.

6. Stones, about 1 foot in depth.

7. \$475, including the building above silo.

8. Corn.

10. When in full blossom.

11. 20 tons to the acre.

12, 13. I think I can raise twice as many tons of southern white as of sweet corn.

14. It was cut into pieces about $\frac{3}{4}$ of an inch long, using steam power,

16. \$1.25.

17. 60 days.

18, 19. It kept well.

20. I think 2 tons of ensilage equal in value to 1 ton of stock hay.

21. The milk is as good as when the cows are fed on hay.

22. Equally as good for other stock as for milch cows.

23. About 40 pounds per day.

24. They had one foddering of hay per day, with brewer's grains.

25. My stock look as well, and are in as good health as they have been for twenty years.

26. If I had not a silo now I would build one as soon as possible.

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ORIS BISBEE, *Poughkeepsie, N. Y.:*

1. The top of the silo is even with a plateau, the bank descending 50 feet to the stable, and very steep. The ensilage is taken out by a hoisting apparatus over the top of the stone wall and carried in a car on a gently descending grade into a small house, built on the roof of the stable, where the bottom falls out, and the ensilage drops to the floor over the stable.

3. Double; 7 and 8 feet wide respectively, by 24x. 5 feet deep.

4. Stone. Outside walls dry, 30 inches thick at the bottom, and 20 at the top. Division wall, 20 inches, laid in cement, and all walls plastered by cement. The walls were built by masons, in accordance with their notions of fitness, with the result of an extravagant cost. Above the silo walls is a curb of matched boards, 6 feet high for settling room—of course, a roof covers the whole.

5. Hemlock planks.

6. Stone, 14 inches thick, and earth banked at ends of plank.

7. Between \$700 and \$800.

9. Plant in drills 30 inches apart; harrow when small, and afterwards keep the ground stirred with cultivator.

10. I cut when the blossom appeared on the tassel. I found in the bottom of both silos a large quantity of the juice, which I was obliged to bail out. On this account I think I shall hereafter let the crop go farther towards maturity.

11. Last year I planted in drills 4 feet apart, and got about 14 tons per acre. This year I am planting much thicker. It appears to me that the maximum crop cannot be much greater than 30 tons per acre. Several tons of my last year's crop weighed $8\frac{1}{2}$ (eight and a quarter) pounds each, and the general growth was quite uniform.

12. I plant the southern horsetooth variety.

14. The longer bits of stalks are the ones not eaten, if any part is left. Inference—it is best to cut the stalks into short pieces. We cut $\frac{3}{4}$ of an inch.

15. The corn from the field is cut on the upper grade, and descends into the silo till the top is reached, when the curb is filled with the shovel. It is expedient, when nearly full, to alternate, so as to give time to settle. A covering of six inches will control the surface heat. When packing we tread it all we can, but depend more on the natural settling.

16. Corn, \$3 per ton. Draw it $1\frac{1}{2}$ miles.

17. Thirty-three days.

18. Spoiled 7 inches deep from top.

19. Exposure to air destroys the

surface—slowly in cold weather, more rapidly in warm.

20. Am now, June 30, feeding corn ensilage to four cows, and it is the only fodder fed except grain. Cows that ate nothing but ensilage through April and May are in the finest condition.

21. Not so good as tender grass—better than hay.

22. For young cattle, good for growth and thrift; for fattening stock, excellent; for some horses good, and for others not good.

23. Corn meal and wheat bran equal parts by weight, or something equivalent, should supplement the ensilage.

25. My cattle and one horse have sleek coats, look healthy about the eyes, and bear the general appearance of thrift, another horse I never succeeded with.

26. Must depend on circumstances. Where the silo is near the crop, I can't see how it can fail to be profitable. Even with the disadvantage of having the crop raised at a distance, I think I realize returns for all I expend, and more. It seems to me that chemical analysis reaches only a part of the whole question. The vital forces concerned in digestion are more important. A mere boy sees the connection existing between flush, tender pasturage and full pails of milk. Tell the boy that the tender grass is little else than vapor, that such a large per cent. is water, easily procured at the brook, that such a small per cent. is ash, that the parts that go to make fat and muscle and butter, after the water is removed, are an insignificant amount, and he may stare and wonder at your learning, but you will fail to convince him that the dried grass is better for pasture than the fresh grass in the pasture. Let me add that a young child fed on the milk of an ensilage-fed cow has no irregularity of the bowels, is good natured, and grows finely.

D. BOOKSTAVEN, *Syracuse, N. Y.:*

1. On level with feeding room, in rear of stable.

3. Two, each 72x16 feet, (depth not stated).

4. Stone wall, smoothed with cement.

5. Plank, well fitted

6. Boulders, 500 pounds per square foot.

7. About \$600.

8. Corn.

9. Sowed in drills—ordinary cultivation.

10. When the corn is in the silk before the kernels glaze.

11. About 25 tons.

12. Mammoth sweet corn.

13. I prefer the sweet, as it is richer food.

14. Cut $\frac{3}{4}$ inch long.

15. Fodder drops directly into silo—spread and tramped by men and horses.

16. Sixty-eight cents a ton.

18. Capital order; smelled sweet; cattle ate it ravenously.

19. No deterioration after opening.

20. Two tons of ensilage equal to a ton of good timothy hay.

21. It caused an increase of milk, from one to three quarts, after three days feeding.

22. Equally good for horses, colts, sheep &c.

23. About 60 pounds a day.

24. I prefer to feed dry corn, or barley meal, or linseed meal, with it; it does well without this by feeding hay once a day.

25. Perfect health, bright eyes, smooth coats and soft skins.

26. The most profitable food ever used. I made some experiments last winter in feeding a heifer, cow, mare with foal, weaning colt, and an old trotting horse. Cut timothy and clover hay, mixed in a large box with an equal amount of ensilage, adding a little corn-meal, coarse bran and shorts