

Croblanc: A Stochastic Double-Yield Staking Ecosystem

Mountain Labs
www.croblanc.com
alpha@croblanc.com
twitter.com/croblancdotcom
t.me/croblancdotcom

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Abstract. A purely decentralized version of yield generating would allow cryptocurrency staking to not only generate yield but also other digital assets. Digital farming provides part of the solution, but the main benefits are lost if the only principle is to mint tokens indefinitely. A superior system would be the generation of more of the same asset, as well as other digital assets by using a stochastic model, which would allow more sustainable yield through the leveraging of more cryptocurrencies, hence stabilizing the price of the initial asset leading to sustainable growth.

1. Introduction

Following the introduction of multiple staking platforms, many digital asset owners have seen a consistent growth during the initial phase of the asset's lifecycle, only to see the generated yield negatively influencing the price of the core asset. The Croblanc ecosystem and its CROBLANC cryptocurrency aim to solve that by both using stochastic yield as well as offering double-yield farming pools.

2. Stochastic yield

In order to secure the growth of the ecosystem, the smart contract defines a mathematical issuance of tokens in a way that sustains the market capitalization of the token. To achieve that, the CROBLANC ecosystem uses stochastic yield through an issuance of tokens which is inversely proportional to the price of the token.

The emission of CROBLANC tokens per second will be equal to:

$$m * 0.031709791983764590 + \frac{T}{600000}$$

where T is the TVL value in USD (add 1 CROBLANC per minute per \$10,000 of TVL), and m is a multiplier determined by the price action of CROBLANC:

$$m = (\min(100; 0.01 + \frac{100}{(1 + \log(5p)) * 10^{(3.8 * \log(0.318 + p) - \log_{10}(2.618))}})) * 0.064$$

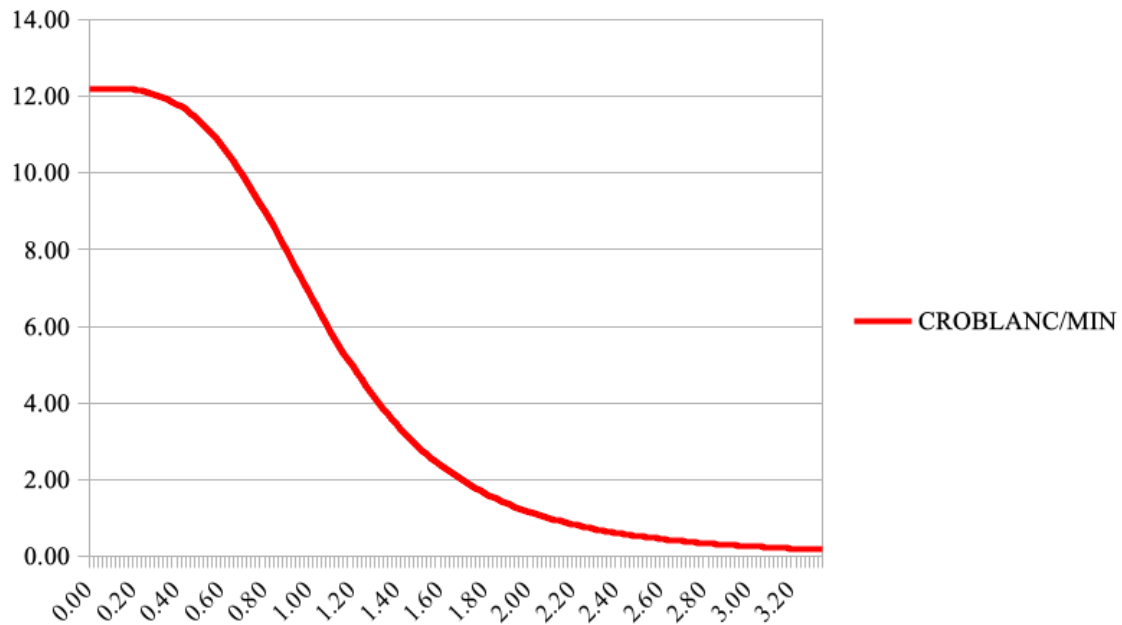
In a scenario where the price of CROBLANC goes down, the token issuance rate would automatically rise in order to mint more tokens and sustain the current yield. A standard stochastic trend model is employed in conjunction with a transformation to mitigate effects of outliers and induce normality.

Evolution of CROBLANC depending

Example of the evolution of the token emission according to a potential market price:

x axis: market price for CROBLANC in \$

y axis: emitted tokens per minute (assuming \$0 TVL, add 1 per \$10,000 worth of TVL)



This formula has already been reviewed and might be reviewed again in the future in order to keep the price of CROBLANC sustainable for everybody.

3. Token

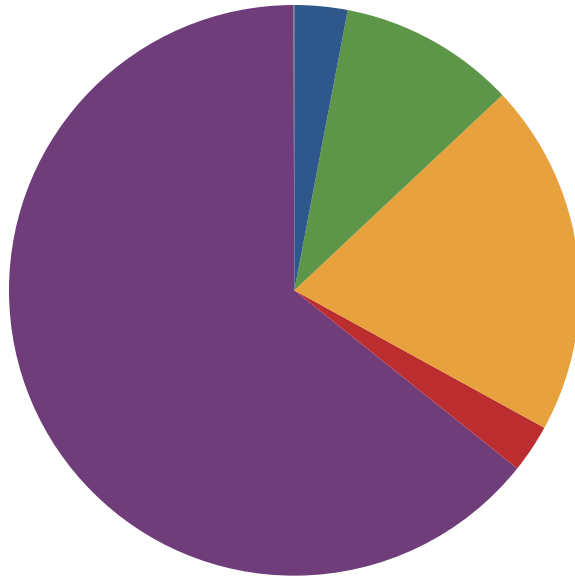
Token name: CROBLANC

Token ticker: CROBLANC

Max Supply: 100,000,000 tokens. There is no way to increase the maximum supply.

There is no team tokens allocation.

● Seed Sale ● Private Sale ● Public Sale ● Initial Liquidity
● Farming ● Airdrop



ALLOCATION	% OF SUPPLY	TOKEN AMOUNT	FIXED/VARIABLE
Seed Sale	3%	3,000,000	Maximum
Private Sale	10%	10,000,000	Maximum
Public Sale	20%	20,000,000	Maximum
Initial Liquidity	2.73%	2,730,000	Variable
Farming	64.22%	64,220,000	Variable
Airdrop	0.05%	50,000	Maximum

Seed Sale

The Seed Sale is a reserve for institutional or major investors. Contact us if you consider joining the project for the long run. Tokens from the seed sale are preminted and prestaked in the dividend pools but they are also vested for 100 days since the day of the token launch. Then tokens are distributed 1% of the purchased amount each day, which means 1% distributed for 100 days.

Private Sale

Tokens from the private sale are vested for 100 days since the day of the token launch. Then tokens are distributed 1% of the purchased amount each day, which means 1% distributed for 100 days.

Public Sale

Tokens from the public sale are vested for 100 days since the day of the token launch. Then tokens are distributed 1% of the purchased amount each day, which means 1% distributed for 100 days.

Initial Liquidity

The Initial Liquidity and Farming allocations might change based on the private and public sales, in order to secure a fair initial distribution of the token. The initial liquidity will account for 2.73% of the total supply of CROBLANC. If the Private and Public Sales are not sold out, the same ratio of liquidity will be provided. The LP will be locked through a smart contract for 12 months from the moment it will be provided.

Farming

Once the tokens from the Farming allocation will be minted, the emission will cease and a new protocol of farming will be implemented in order to drive the farming mechanism.

Performance Fees

The CROBLANC platform charges performance fees on double-yield farms:

- 5% are redistributed to the hodlers of CROBLANC who stake it for xCROBLANC.
- 5% are used to automatically buyback the CROBLANC token and support its price.
- 5% are distributed to Mountain Labs in order to drive adoption of the platform (development, marketing, infrastructure, etc.).

There are no deposit or withdrawal fees on the single farm of CROBLANC. The performance fees are on top of the gas fees paid by using the Cronos chain.

Burn

There are two burn functions in the smart contract: Burn and Burn Forever.

The Burn function allows for tokens to be burned, but then the farming mechanism will be able to mint those tokens again, always to the limit of the maximum supply.

```
function burn(uint256 _amount) external {
    _burn(msg.sender, _amount);
}
```

The Burn Forever function will let the system burn tokens forever, which will then decrease the maximum supply. The smart contract will not allow to mint more than the newly decreased maximum supply.

```
function burnForever(uint256 _amount) external {
    _burn(msg.sender, _amount);
    maxTotalSupply = maxTotalSupply.sub(_amount);
}
```

Airdrop

A maximum of 50,000 CROBLANC tokens will be airdropped to the users who followed some instructions and supported the platform.

4. Double-Yield Farms

In order to earn double-yield, users of the Croblanc ecosystem will be able to farm LP's and earn not only one token, but two, as seen below:

The screenshot shows the Croblanc Testnet interface with a navigation bar containing 'TESTNET', 'PRESALE', 'FARMS', 'DIVIDENDS', and 'BLANCPAPER'. A user balance of \$0.20 is shown. A notification prompts the user to 'Please install MetaMask'. Two farming options are listed:

LP Name	In Wallet	Deposited	Farmed	Total Value Locked	Farm APR
CRO-CRONA LP CronaSwap Classic	0.000000 \$0.00	0.000000 \$0.00	0.000000 0.000000	\$0	23,164,755.45% daily: 63,465.08%
CRO-VVS LP VVS Finance Classic	0.000000 \$0.00	0.000000 \$0.00	0.000000 0.000000	\$0	22,473,038.73% daily: 61,569.97%

Below the list, it says 'And much more to come...'

The two tokens will be simultaneously distributed to the farmers, who will be able to harvest their rewarded tokens whenever they want. Tokens are distributed live at every block.

The screenshot shows the detailed view for the CRO-CRONA LP farm. It displays the following information:

Category	Value
In Wallet	0.000000 \$0.00
Deposited	1.000000 \$1.89
Farmed	8.733876 0.000041
Total Value Locked	\$10
Farm APR	19,419,857.60% daily: 53,205.09%

Below the table, there are two progress bars:

- In wallet:** 0.000000 CRO-CRONA LP. Deposit: 0.000000 CRO-CRONA LP (0.0%).
- Deposited:** 1.000000 CRO-CRONA LP. Withdraw: 0.000000 CRO-CRONA LP (0.0%).

At the bottom, there are four buttons:

- (1) Approved CRO-CRONA LP ✓ (Green)
- (2) Deposit 0.0% (Grey)
- Withdraw 0.0% CRO-CRONA LP (Grey)
- Harvest 8.73 CROBLANC + 0.00 CRONA (Blue)

5. Dividends

CROBLANC belongs to its token holders. As such, 1% performance fee is charged on all double-yield pools and converted into CRO and then redistributed to the stakers of CROBLANC.

Stakers of CROBLANC initially receive xCROBLANC, which are redeemable for CROBLANC at no cost. Apart from gas fees, there are no fees taken on the Dividends platform: no deposit fees, no withdrawal fees, no minimum duration, no unstake lock.

Stakers of CROBLANC have the ability to claim dividends in the form of CRO.

The screenshot displays the CROBLANC Dividends interface. At the top, the navigation bar includes 'CROBLANC TESTNET', 'PRESALE', 'FARMS', 'DIVIDENDS', and 'BLANCPAPER'. A balance of '\$0.20' and a 'Please install MetaMask' notification are visible. The main heading is 'DIVIDENDS'. Below it, a text block explains that CROBLANC belongs to its token holders and that a 1% performance fee is charged on all pools, converted into CRO and then redistributed. An APR of 51.08% is shown, paid in CRO, based on the last 7 days average earnings. Two summary cards are present: 'Your staked CROBLANC' showing 0.000000 CROBLANC (\$0.00) and 'Claimable Dividends' showing 0.000000 CROBLANC (\$0.00) with a 'Claim' button. Below these is a transaction flow diagram with two columns. The left column shows 'In wallet: 0.000000 CROBLANC' and 'Deposit: 0.00000000 CROBLANC (0.0%)' with buttons for '(1) Approve CROBLANC' and '(2) Deposit 0.0%'. The right column shows 'Deposited: 0.000000 CROBLANC' and 'Withdraw: 0.00000000 CROBLANC (0.0%)' with a 'Withdraw 0.0% CROBLANC' button. At the bottom, 'Details on CROBLANC single staking' are provided, including instructions to deposit CROBLANC to earn CRO, with no deposit or withdrawal fees, no minimum duration, and no unstake lock. MetaMask addresses for CROBLANC and xCROBLANC are also listed.

6. Disclaimer

Anyone wishing to invest should seek his or her own independent financial or professional advice. Before purchasing CROBLANC, you must understand the inherent risks in the trading of cryptocurrencies. Mountain Labs does not recommend to purchase, sell or hold any digital asset. Please do your own research before purchasing the CROBLANC token. You agree that you are not purchasing a security or investment and you agree to hold Mountain Labs harmless and not liable for any losses or taxes you may incur.

Extreme changes in price may occur at any time, resulting in a potential loss of value, complete or partial loss of purchasing power, and difficulty or a complete inability to sell or exchange your digital currency. Mountain Labs shall be under no obligation to purchase or to broker the purchase back cryptocurrencies from you in circumstances where there is no viable market for the purchase of the same. The products and services presented on the Croblanc Website may only be purchased in jurisdictions in which their marketing and distribution are authorized. You should not have any form of expectations from Croblanc. Always make sure that you are in compliance with your local laws and regulations before you make any purchase. None of the content published on the Croblanc site constitutes a recommendation that any particular cryptocurrency, portfolio of cryptocurrencies, transaction or investment strategy is suitable for any specific person.