

Wrapped Banano
Smart Contract
Audit Report





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# **AUDITED DETAILS**

## Audited Project

Project name	Token ticker	Blockchain	
Wrapped Banano	wBAN	Polygon Matic	

## Addresses

Contract address	0xe20b9e246db5a0d21bf9209e4858bc9a3ff7a034	
Contract deployer address	0x5841565Bd231a868e47347d9749eF06AF5cA0970	

## Project Website

https://wrap.banano.cc/

## Codebase

https://polygonscan.com/address/0xe20b9e246db5a0d21bf9209e4858bc9a3ff7a034#code



## **SUMMARY**

Banano is a 4th generation fungible & edible cryptocurrency with a cool yellow logo. Our team is top-notch, and the project advisors are, by a moonshot, the best in the business.

## Contract Summary

#### **Documentation Quality**

Wrapped Banano provides a very good documentation with standard of solidity base code.

• The technical description is provided clearly and structured and also dont have any high risk issue.

#### **Code Quality**

The Overall quality of the basecode is standard.

 Standard solidity basecode and rules are already followed by Wrapped Banano with the discovery of several low issues.

#### **Test Coverage**

Test coverage of the project is 100% (Through Codebase)

## Audit Findings Summary

- SWC-101 | It is recommended to use vetted safe math libraries for arithmetic operations consistently on lines 563, 602, 563 and 602.
- SWC-103 | Pragma statements can be allowed to float when a contract is intended on lines 7.



# CONCLUSION

We have audited the Wrapped Banano project released in January 2021 to discover issues and identify potential security vulnerabilities in Wrapped Banano Project. This process is used to find technical issues and security loopholes which might be found in the smart contract.

The security audit report provides satisfactory results with low-risk issues.

The issues in the Wrapped Banano smart contract code do not pose a considerable risk. The writing of the contract is close to the standard of writing contracts in general. The low-risk issue found is a floating pragma is set. It is recommended to specify a fixed compiler version to ensure that the bytecode produced does not vary between builds. This is especially important if you rely on bytecode-level verification of the code.



# **AUDIT RESULT**

Article	Category	Description	Result	
Default Visibility	SWC-100 SWC-108	Functions and state variables visibility should be set explicitly. Visibility levels should be specified consciously.		
Integer Overflow and Underflow	SWC-101	If unchecked math is used, all math operations should be safe from overflows and underflows.	ISSUE FOUND	
Outdated Compiler Version	SWC-102	It is recommended to use a recent version of the Solidity compiler.	PASS	
Floating Pragma	SWC-103	Contracts should be deployed with the same compiler version and flags that they have been tested thoroughly.	ISSUE FOUND	
Unchecked Call Return Value	SWC-104	The return value of a message call should be checked.	PASS	
Unprotected Ether Withdrawal	SWC-105	Due to missing or insufficient access controls, malicious parties can withdraw from the contract.	PASS	
SELFDESTRUCT Instruction	SWC-106	The contract should not be self-destructible while it has funds belonging to users.	PASS	
Reentrancy	SWC-107	Check effect interaction pattern should be followed if the code performs recursive call.	PASS	
Uninitialized Storage Pointer	SWC-109	Uninitialized local storage variables can point to unexpected storage locations in the contract.	PASS	
Assert Violation	SWC-110 SWC-123	Properly functioning code should never reach a failing assert statement.  PASS		
Deprecated Solidity Functions	SWC-111	Deprecated built-in functions should never be used.	. PASS	
Delegate call to Untrusted Callee	SWC-112	Delegatecalls should only be allowed to trusted addresses.	PASS	



DoS (Denial of Service)	SWC-113 SWC-128	Execution of the code should never be blocked by a specific contract state unless required.		
Race Conditions	SWC-114	Race Conditions and Transactions Order Dependency should not be possible.		
Authorization through tx.origin	SWC-115	tx.origin should not be used for authorization.	PASS	
Block values as a proxy for time	SWC-116	Block numbers should not be used for time calculations.		
Signature Unique ID	SWC-117 SWC-121 SWC-122	Signed messages should always have a unique id. A transaction hash should not be used as a unique id.		
Incorrect Constructor Name	SWC-118	Constructors are special functions that are called only once during the contract creation.		
Shadowing State Variable	SWC-119	State variables should not be shadowed.		
Weak Sources of Randomness	SWC-120	Random values should never be generated from Chain Attributes or be predictable.		
Write to Arbitrary Storage Location	SWC-124	The contract is responsible for ensuring that only authorized user or contract accounts may write to sensitive storage locations.		
Incorrect Inheritance Order	SWC-125	When inheriting multiple contracts, especially if they have identical functions, a developer should carefully specify inheritance in the correct order. The rule of thumb is to inherit contracts from more /general/ to more /specific/.		
Insufficient Gas Griefing	SWC-126	Insufficient gas griefing attacks can be performed on contracts which accept data and use it in a sub-call on another contract.		
Arbitrary Jump Function	SWC-127	As Solidity doesnt support pointer arithmetics, it is impossible to change such variable to an arbitrary value.	PASS	



Typographical Error	SWC-129	A typographical error can occur for example when the intent of a defined operation is to sum a number to a variable.	
Override control character	SWC-130	Malicious actors can use the Right-To-Left-Override unicode character to force RTL text rendering and confuse users as to the real intent of a contract.	
Unused variables	SWC-131 SWC-135	Unused variables are allowed in Solidity and they do not pose a direct security issue.	PASS
Unexpected Ether balance	SWC-132	Contracts can behave erroneously when they strictly assume a specific Ether balance.	
Hash Collisions Variable	SWC-133	Using abi.encodePacked() with multiple variable length arguments can, in certain situations, lead to a hash collision.	
Hardcoded gas amount	SWC-134	The transfer() and send() functions forward a fixed amount of 2300 gas.	
Unencrypted Private Data	SWC-136	It is a common misconception that private type variables cannot be read.	PASS



# **SMART CONTRACT ANALYSIS**

Started	Monday Aug 30 2021 09:17:59 GMT+0000 (Coordinated Universal Time)
Finished	Tuesday Aug 31 2021 07:14:02 GMT+0000 (Coordinated Universal Time)
Mode	Standard
Main Source File	TransparentUpgradeableProxy.sol

# Detected Issues

ID	Title	Severity	Status
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	COMPILER-REWRITABLE " <uint> - 1" DISCOVERED</uint>	low	acknowledged
SWC-101	COMPILER-REWRITABLE " <uint> - 1" DISCOVERED</uint>	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged



# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

**LINE 563** 

#### **low SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- TransparentUpgradeableProxy.sol

```
562 constructor(address _logic, bytes memory _data) payable {
563   assert(_IMPLEMENTATION_SLOT ==
   bytes32(uint256(keccak256("eip1967.proxy.implementation")) - 1));
564   _upgradeToAndCall(_logic, _data, false);
565  }
566
567
```



# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

**LINE 602** 

#### **low SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- TransparentUpgradeableProxy.sol

```
601 constructor(address _logic, address admin_, bytes memory _data) payable
ERC1967Proxy(_logic, _data) {
602   assert(_ADMIN_SLOT == bytes32(uint256(keccak256("eip1967.proxy.admin")) - 1));
603   _changeAdmin(admin_);
604  }
605
606
```



## SWC-101 | COMPILER-REWRITABLE "<UINT> - 1" DISCOVERED

**LINE 563** 

#### **low SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- TransparentUpgradeableProxy.sol

```
562 constructor(address _logic, bytes memory _data) payable {
563   assert(_IMPLEMENTATION_SLOT ==
   bytes32(uint256(keccak256("eip1967.proxy.implementation")) - 1));
564   _upgradeToAndCall(_logic, _data, false);
565  }
566
567
```



## SWC-101 | COMPILER-REWRITABLE "<UINT> - 1" DISCOVERED

**LINE 602** 

#### **low SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- TransparentUpgradeableProxy.sol

```
601 constructor(address _logic, address admin_, bytes memory _data) payable
ERC1967Proxy(_logic, _data) {
602   assert(_ADMIN_SLOT == bytes32(uint256(keccak256("eip1967.proxy.admin")) - 1));
603   _changeAdmin(admin_);
604  }
605
606
```



## SWC-103 | A FLOATING PRAGMA IS SET.

LINE 7

#### **low SEVERITY**

The current pragma Solidity directive is ""^0.8.0"". It is recommended to specify a fixed compiler version to ensure that the bytecode produced does not vary between builds. This is especially important if you rely on bytecode-level verification of the code.

#### Source File

- TransparentUpgradeableProxy.sol

```
6
7 pragma solidity ^0.8.0;
8
9 /**
10 * @dev Library for reading and writing primitive types to specific storage slots.
11
```



## **DISCLAIMER**

This report is subject to the terms and conditions (including without limitation, description of services, confidentiality, disclaimer and limitation of liability) set forth in the Services Agreement, or the scope of services, and terms and conditions provided to you ("Customer" or the "Company") in connection with the Agreement. This report provided in connection with the Services set forth in the Agreement shall be used by the Company only to the extent permitted under the terms and conditions set forth in the Agreement. This report may not be transmitted, disclosed, referred to, or relied upon by any person for any purposes, nor may copies be delivered to any other person other than the Company, without Sysfixed's prior written consent in each instance.

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This is a limited report on our findings based on our analysis, in accordance with good industry practice as of the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, the details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report. While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the below disclaimer below – please make sure to read it in full.

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## **ABOUT US**

Sysfixed is a blockchain security certification organization established in 2021 with the objective to provide smart contract security services and verify their correctness in blockchain-based protocols. Sysfixed automatically scans for security vulnerabilities in Ethereum and other EVM-based blockchain smart contracts. Sysfixed a comprehensive range of analysis techniques—including static analysis, dynamic analysis, and symbolic execution—can accurately detect security vulnerabilities to provide an in-depth analysis report. With a vibrant ecosystem of world-class integration partners that amplify developer productivity, Sysfixed can be utilized in all phases of your project's lifecycle. Our team of security experts is dedicated to the research and improvement of our tools and techniques used to fortify your code.